```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Title:
Perfect score:
იი
                                                  O
                                                                                                    Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Post-processing: Minimum Match 0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Minimum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. score grea and is den
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB
BB
                                                           428
424.8
353
345.6
316.2
268.2
                                                                                                                                                                                        589.6
502.2
501.8
501.8
4499.6
4488.4
482.6
88.4
482.6
88.8
                                                                                                                                                                                                                                                                                                                                                                                                                                      Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              seg length: 0
seg length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          No. is the number of results predicted by chance to have a greater than or equal to the score of the result being printed, s derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9:
10:
11:
12:
13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         48236798 seqs, 27959665780 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-667-289-1
2857.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               October 14, 2006, 12:40:35; Search time 13047 Seconds (without alignments)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST:*
18.3
117.6
117.5
117.5
117.5
116.6
116.6
115.7
112.1
112.1
112.1
112.1
112.1
112.1
112.1
112.1
112.1
112.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
113.1
1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Maximum Match 100%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gb_est8:*
gb_est9:*
gb_gss1:*
gb_gss2:*
gb_gss3:**
gb_gss3:**
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gb_htc:*
gb_est2:*
gb_est7:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gb_est3:*
gb_est4:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gb_est1:*
                                                                                                                                                                                                                                                                                                                                                                                                                                   Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     est6:*
                                                           GenCore version 5.1.9 (c) 1993 - 2006 Biocceleration Ltd
                                                                                                                                                                                             77774
                                                                               BF211696
BF183992
BP282008
CD708943
AG154727
BF2138439
BF238439
BF238439
CC496590
CC496590
BQ228535
BQ228535
BQ228535
BQ228535
BQ228535
                  AQ699233
AQ678212
DB302402
                                                                                                                                                                                                                                                                                                                                                                                                                                      ij
                                                                                                                                                                                                                                                                                                                                                                                        AG176412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (without alignments)
12253.650 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96473596
                                                                           AG176412 Pan trogl
BF211696 601812317
BF183992 601843003
BP282008 BF282008
CD708943 EST25470
AG154727 Pan trogl
BF210400 601874494
BF238439 601904735
BF209716 601874259
BF238869 601904499
BF238869 601904499
CC496590 CH240 332
BC228835 AGENCOÜRT
BF239183 601905584
CB429984 605838 MA
BF212748 601813991
                                                                                                                                                                                                                                                                                                                                                                                                                                 Description
             AQ699233 HS_5565_A
AQ678212 HS_5518_B
DB302402_DB302402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2859
```

	ი	ი		ი		ი	ი	ი	ი	ი	ი			ი		o	ი		ი		ი	ი	ი	ი	a	ი
	45	44	43	42	41	40	39	38	37	36	35	34	ü	32	31	30	29	28	27	26	25	24	23	22	21	20
	240.6	240.6	240.8	240.8	241.2	241.4	241.6	241.6	241.6	241.6	241.6	241.8	241.8	241.8	241.8	241.8	241.8	242	242.6	242.6	242.8	243.2	243.2	243.6	243.8	245.8
	8.4			8.4			8 .5	8.5							8 .5		8 5							8.5		8.6
	662	519	583	376	5037	757	1159	579	575	530	510	2535	1336	704	562	522	471	472	1270	446	403	604	539	946	557	635
	14	4.	w	w	σ	ω	N	14	ø	9	9	თ	N	14	w	w	_	9	σ	7	N	ω	7	H	11	14
	DU840715	BX503510	BP330444	BM672810	HSM807357	BQ429569	BM465227	DU666109	DB078664	DA804558	DA804882	AF464877	BG674233	AG113471	BQ638837	BU727226	AI753904	DA156998	BC016019	BE140949	BG941633	BM990713	AWS00534	AQ744276	AQ674674	DU666845
1	DU840715 MUGQ_CH25	BX503510 DKFZp313E	BP330444 BP330444	UI-E	BX647213 Homo sapi	BQ429569 AGENCOURT	BM465227 AGENCOURT	DU666109 Ciuffi-HI	DB078664 DB078664	DA804558 DA804558	DA804882 DA804882	AF464877 Homo sapi	BG674233 602619894	AG113471 Pan trogl	BQ638837 hd28b12.y	BU727226 UI-E-CR0-	AI753904 cr15g10.x	DA156998 DA156998	BC016019 Homo sapi	BE140949 MR0-HT006	BG941633 ax15d09.x	BM990713 UI-H-DI0-	AW500534 UI-HF-BNO	AQ744276 HS_5508_A	AQ674674 HS_5485_B	DU666845 Ciuffi-HI

ALIGNMENTS

```
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1
AG176412
LOCUS
                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                         source
                                                                                                                                                                                                                                                                                      Submitted (02-AUG-2001) Asao Pujiyama, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC); 1-7-22 Suehiro-chou, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:chimpbes@gsc.riken.go.jp/, URL:http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9111, Fax:81-45-503-9170)
Clones are derived from the chimpanzee BAC library RPCI-43 This BAC end was generated during the R&D process and may have higher chance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fujiyama,A., Hattori,M., Toyoda,A., Taylor,T.D., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
BAC end sequences of Library RPCI-43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bequence.
AG176412
AG176412.1 GI:16706092
GSS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 (bases 1 to 651)
Fujiyama, A., Hattori, M., Toyoda, A., Taylor, T.D., Yada, Totoki, Y., Watanabe, H. and Sakaki, Y.
                                                                                                                                                                                                 Sequencing: T7
                                                                                                                                                                                                                                                                     of clone tracking errors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pan troglodytes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pan troglodytes (chimpanzee)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AG176412
Pan troglodytes DNA, clone: RP43-047K09.T7, genomic survey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hominidae; Pan.
                                                                                                                                                                                                                                                PRIMERS
                                                                                                          Vector : pBACe3.6
R.Site 1 : EcoRI
R.Site 2 : EcoRI.
Location/Qualifiers
/organism="Pan troglodytes"
/mol_type="genomic DNA"
/db_xref="taxon:9598"
/clone="RP43-047K09.T7"
                                                                                           . 651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GSS 09-JAN-2002
```

```
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                  REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                 RESULT 2
BF211696
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             श्
                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                          중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              श्च
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 617; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                   2287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1747 AATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCTCCTGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1867 TATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTTGGGGAATCGTGAATGA 1926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   144
Hominidae; Homo.

1 (bases 1 to 757)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mam
Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                    564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24 AATATTTCTTCGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCTCCTGACAT
                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                    BF211696
BF211696.1
                                                                                                                                                                                                                                                  601812317F1 NIH_MGC_54 Homo sapiens
                                                                                                                                                                                                                                    mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTTGGAAAGCCACTTCAATAG
                                                                                                                                                                                                                                                                                                                                                     GAA-GTGGGACATGCTTCATGTTCACACAT 651
                                                                                                                                                                                                                                                                                                                                                                      GAAGGTGGAACATGCTTCATGGTCACACAT 2376
                                                                                                                                                                                                                                                                                                                                                                                                                  CAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAGCTCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAGCTCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTTTCTACCAATCTTGTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTATTCACATACAAATCTTCACGTGGACACATGTTTTCATTTCCCTTGGATAAATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTATTCACATACAAATCTTCACATGGACACATGTTTTCATTTCCCTTGGATAAATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAATCTGAACTTGGGTTTTCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAATCTGAACTTGGGTTTTCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATTTCACTCTTGGAAAAGTAGAGCTGTGTGGTCAAAATCAATATGAGAAAGCTGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATTTCACTCTTGGAAAAGTAGAGCTGTGTGGTCAAAATCAATATGAGAAAAGCTGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCACTTCAATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGAATCGTGAATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACAAAACTCAGTAGAGGAGGAAACCACCACGCTTTTGGAAAATGATTCACCCAGTGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTTGGAAAATGATTCACCCAGTGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGTAGGGGATTACTGGGCCATATGATAAGCATATGTTTCAGTTCTACCAATCTTGTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /sex="male"
/cell_type="lymphocytes"
/clone_lib="RPCI-43 Chim
                                                                                                                                                                                                     GI:11105282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 589.6; DB 14;
Pred. No. 4.1e-79;
1; Mismatches 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chimpanzee Male BAC Library"
                                                    Mammalian
                                                                                                                                                                                                                                                     mRNA linear EST 06-NOV-2
s cDNA clone IMAGE:4046500 5',
                                                    Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                    Collection (MGC)
                                                                                                                                                                                                                                                                     EST 06-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                    2346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1806
                                                                                                                                                                                                                                                                                                                                                                                                                      622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ŋ
                                   밁
                                                           S
                                                                                                      밁
                                                                                                                                 ঠ
                                                                                                                                                                                               $
                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                              $
                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                   몆
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
   S
                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 643;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                     1986
                                                                                                                                                                                                                                                                                                                                    1926
                                                                                                                                                                                                                                                                                                                                                                                                      1866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1686 GGTTACAAAAGCATCCTAATTTTTGCTTTTTCTGTTTCAAGTGTGAATTCACTAAGCAACA
                                                                     2166
                                                                                                                                      2106
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1806 TACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCCAGTGAAA 1865
                                                                                                                                                                                      2046 GCAATCTGAACTTGGGTTTTCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGAAAAAA 2105
   2225 TCCAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAGCTCC
                                                                                                                                                                     356
                                                                                                                                                                                                                                                                                                                                                                    179
                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                    296
                                                                                                                                                                                                                                                                                                     237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60 CAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCTCCTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   μ
                                                                                                                                                                                                                                                       GGATTTCACTCTTGGAAAAGTAGAGCTGTGTGGTCAAAATCAATATGAGAAAAGCTGCCTT
                                                                                                                                                                                                                                                                                                                        AGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTTGGAAAGCCCACTTCAATA 1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCTCCTGACA 1805
                                                                                                                                                                                                                                                                                                                                                                                       CTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTTGGGGATCGTGAATG 1925
                                                             TAGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTTCTACCAATCT-TGTT
                                                                                                                                                                                                                                                                                                                                                                      CTATTCCAGAACAGACCCTGCTTCCTGATGAA-TTGTCTCCTG-TTGGGGATCGTGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTTACAAAAGCATCCTAA-TTTGCTTTTTCTGTTTTCAAGTGTGAATTCACTAAGCAACA
                                                                                                    ATGTATTCACATACAAATCTTCACATGGACACATGTTTTCATTTCCCTTGGATAAATACC 2165
                                                                                                                                                                       GCAATCTGAACTTGGGTTTTTCCCTGCAATAGAAATTGAAATTCTGCCTCTTTTTGAAAAAA
                                                                                                                                                                                                                                      GGATTTCACTCTTGGAAAAGTAGAGCTGTGTGGTCAAAATCAATATGAGAAAAGCTGCCTT
                                                                                                                                                                                                                                                                                                     AGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATA-TTTGGAAAGCCACTTCAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                   TACAAAACTCAGTAGAGGAAGGAAACCACCATGC-TTTGGAAAATGATTCACCCAGTGAAA 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
```

7;

Indels

7;

Gaps

7;

119

59

295

236

2045

355

2224 475

535

2284

```
Tissue Procurement: ATCC CDNA Library Preparation: CLONETECH Laboratories, Inc. CDNA Library Preparation: CLONETECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.B. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can found through the I.M.A.G.B. Consortium/LLNL at: http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 High quality sequence stop: 648.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Plate: LLCM874 row: b column:
                                                                                                                                                                 /note=Torgan: bone marrow; Vector: pDNR-LIB (Clontech);
Site 1: SfiI (ggccgcctcggcc); Site 2: SfII
(ggccattattggcc); Double-stranded cDNA was prepared from
cell line RNA. 5' and 3' adaptors were used in cloning as
follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and
3' adaptor sequence:
5'-ATTCTAGAGCCGACGCGACGAGGCGCGACATG-dT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size
1.75 kb (range 0.9-4.0 kb). 15/15 colonies contained
inserts by PCR. This library was enriched for full-length
clones and was constructed by Clontech Laboratories (Paio
Alto, CA)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol type="mrNa"
/mol type="mrNa"
/db xref="teaxon:9606"
/clone="IMAGE:4046500"
/tissue_type="from chronic myelogenous leukemia"
/lab host="DH108 (T1 phage-resistant)"
/clone_lib="NIH_MGC_54"
                                         19.7%;
Score 562.4; DB
Pred. No. 5e-75;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                    7;
                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            þ
```

1852

1912

```
JOURNAL COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 3
BF183992
LOCUS
                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                           밁
                                                                                                                                   B
                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 673; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA Library Preparation: CLONETECH Laboratories, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
plate: LLCM897 row: e column: 01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hominidae; Homo.

1 (bases 1 to 842)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BF183992
BF183992.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601843003F1 NIH_MGC_54 Homo sapiens
   GGAAATAATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGTGTGAAT
                                                                                   AGCAATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCA
                                                                                                                                       GATCTCAACACTGGATATAAACCCCCAAATTTCCAAATTTTCTGCCTGAGGGAAGCCATCTC
                                                                                                                                                               GATCTCAACACTGGATATAAACCCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGGCCTTTTAATTTTAGCCATTCTCCTGGCCTCATTTCTTAAAATTAGAGATTCAGG 653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGCCTTTTTAATTTTAGCCATTCTTCT-GCCTMATTTCTTAAAATTAGAGAATTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAGCTCC 595
                                                             AGCAATAATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   quality sequence stop: 635.
Location/Qualifiers
                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                       C, or G and N = A, C, G, or T). Average insert size 1.75 kb (range 0.9-4.0 kb). 15/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo Alto, CA)."
                                                                                                                                                                                                                                                                                                                                                                                                                                         /note=WOrgan: bone marrow; Vector: pDNR-LIB (Clontech); Site 1: Sfil (ggccgcctcggcc); Site 2: Sfil (ggccgctctggcc); Double-stranded cDNA was prepared from cell line RNA. 5' and 3' adaptors were used in cloning follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' are sequenced.
                                                                                                                                                                                                                                                                                                                                                                                                   3' adaptor sequence:
5'-ATTCTAGAGGCCGAGGCCGACATG-dT(30)BN-3' (where
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /tissue_type="from chronic myelogenous leukemia"
/lab_host="DH10B (T1 phage-resistant)"
/clone_lib="NIH_MGC_54"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:4063848"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GI:11062336
                                                                                                                                                                                                                   18.3%;
96.3%;
htive
                                                                                                                                                                                                               <u>;</u>
                                                                                                                                                                                                             Score 522.2; DB 7
Pred. No. 5.5e-69;
0; Mismatches 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mRNA linear EST 31-OC CDNA clone IMAGE:4063848
                                                                                                                                                                                                                                                 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gene
                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                     Length 842;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Collection (MGC)
                                                                                                                                                                                                               13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EST 31-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2341
                                                                                                 1672
                                                                                                                                                                           1612
                                                                                                                                                                                                                                                                                                                                                                                                                                               and
                                                                                                                                       60
                                                             120
                                                                                                                                                                                                               13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 4
BP282008
                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                     FEATURES
                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                       2153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121 GGAAATAATCCCCAGGTTACAAAAGCATCCTAA-TTTGCTTTTCTGTTTCAAGTGTGAAT 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP282008
BP282008 Sugano cDNA library, clone KMR03033, mRNA sequence
                                                                                                                                                     Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Jaj
Tel: 81-3-5449-5416
Fax: 81-3-5449-5416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                     Contact: Yutaka Suzuki
                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCAATCTTGTTTCCAGAGTAGTGACATTTCTGTGCTCC 2251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTTTTGAAAAAATGTATTCACATACAAATCTTCACATGGACACATGTTTTCATTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGGATCGTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCACCCAGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTTGTCTCCTGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTTCTCCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCACTAAGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGGATAAATACCTAGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGAAAGCTGCCTTGCAATCTGAACTTGGGTTTTCCCTGCAATAGAAATTGAATTCTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCCACTTCAATAGGATTTCACTCTTGGAAAAGTAGAGCTGTGTGGTCAAAATCAATATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCACCCAGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAA-TTGTCTCCTG-TTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCACTAAGCAACACAATATTTC-TGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACC-ATCTTGGTTCCAGAGTAGTGACTTCTGTGGTCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTTTGAAAAAGAATGTATTCACATACAAATCTTCACATGGACACATGTTTTCATTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGAAAGCTGCC-TGCAATCTGAAC-TGGGTTTTCCCTGCAATAGAAATTGAATTCTG-CT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCCACTTCAATAGGATTTCACTCTTGGAAAAGTAGAGCTGTGTGGTCAAAATCAATATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGGATCGTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATA-TTTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTTCTCCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGC-TTTGGAAAATGAT
                                                                                                                   ysuzuki@hgc.jp.
Location/Qualifiers
/organism="Homo sapiens"
/mol type="mann;9606"
/db_xref="t-axon;9606"
/clone="kwR03033"
/tissue_type="bone marrow"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (human)
                                                                                                                                                                                                                                                                                                                                                                     Shirota, M., Sakakibara, Y., Chiba, J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     , bone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     marrow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       K562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
```

reveals a homologous

Homo

EST 16-SEP-2004

2092

2032

414 1972 355

474

2212

648

2152 531

```
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                        RESULT 5
CD708943
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ৪
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                           맑
                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 506; Conserv
                                                                                                                                                                                                                                           ORGANISM
             source
                                                                                                                                                                                                                                                                                                                                                                                                                    1383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        131
                                                                                                                                                                                                                                                                                                                                                                                                                                               491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        903 ACCADACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGAAT
                                                                                                                                                                                                                                                                                                                                                                                           551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             71
                                                                                                                  Transcriptional Gene
Unpublished (2003)
Contact: YiXin Zeng
                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleo
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                          Homo
                                                                                                                                                                                                                                                                                            CD708943
EST25470 human nasopharynx Homo
CD708943
                                                                 651 DongFeng Road East,
Tel: 86-1380-9770-743
                                                                                                                                                                        1 (bases 1 to 602)
Liu, X.-Q., Zhou, Y.,
                                                                                                        Cancer Center
                                                                                                                                                             Zeng, Y.
                                                                                                                                                                                                    Hominidae; Homo.
                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                    CD708943.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAAACAGTTCCCCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                         ATTCCAGTGAGCAGGTCCTATATGTTGATCCCA 1415
                                                                                                                                                                                                                                                                                                                                                                                                                                               ATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAATAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAATAATA 1382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATTCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATTCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTTTGCTGTTATGTTGATTCTTTTGATTGGGATATTTAACAGATCATTCCGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTCCGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATGATCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATGATCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCACATCAAAAGCATTCCAACATGACACATGGACATTCTGGGCTAACAGTTGCTTCCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCCATGTGGAACTGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGAAT
                                                                                                                                                                                                                                                                                                                                                                                           ATTCCAGTGAGCAGGTCCTATATGTTGATCCCA
                                                                                            Yat-sen University
                                                   86-20-8775-4506
                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                      yxzeng@gzsums.edu.cn.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /cell_line="K562"
/clone_lib="Sugano cDNA library, bone marrow K562"
/note="chronic myelogenous leukemia"
organism="Homo sapiens"
             1. .602
                                                                                                                                                                                                                                                                                    GI:32239573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17.6%;
98.6%;
                                                                                                                                                                          Zhang, L.-J.,
                                                                                                                                               Expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 501.8;
Pred. No. 7.3e
0; Mismatches
                                                                               GuangZhou
                                                                                                                                                                                                                                                                                                            mRNA linear
sapiens cDNA, mRNA
                                                                                                                                               Profile
                                                                                                                                                                          Xu,H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; DB 3;
                                                                                510060,
                                                                                                                                                                                                                                                                                                                                                                                           583
                                                                                                                                               0£
                                                                                                                                                                          Chen, H.-K.,
                                                                                China
                                                                                                                                               Human Nasopharynx
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                            sequence
                                                                                                                                                                                                                               Buteleostomi;
                                                                                                                                                                          Pan, Z.-G
                                                                                                                                                                                                                                                                                                                          EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                          25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    250
```

```
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                     RESULT 6
AG154727
LOCUS
                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                   REFERENCE
                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 499; Conserv
                                                                                              TITLE
                             TITLE
                                                       AUTHORS
                                                                                 JOURNAL
               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                   508
                                                                                                                                                                                                                                                                                                                                                                                                             523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           163
                                                                                                                                                                                                                                                                                                                                                          583
                                                                                                                                                                                                                                                                                                                                                                                                                                      448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28
                                                                                                                                                                                                                    AG154727
AG154727.1
GSS.
Fujiyama, A., Hattori, M., Toyoda, A., Tay
Totoki, Y., Watanabe, H. and Sakaki, Y.
Direct Submission
Submitted (02-AUG-2001) Asso Fujiyama,
and Chemical Research (RIKEN), Genomic
                                                                                                                                                            Pan troglodytes
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Buarchontoglires; Primates; Catarrhini;
                                                                                           Fujiyama,A., Hattori,M., Toyoda,A.,
Totoki,Y., Watanabe,H. and Sakaki,Y.
BAC end sequences of Library RPCI-43
                                                                               Unpublished
                                                                                                                                                                                                                                                                        Pan troglodytes DNA,
                                                                                                                                                    Hominidae; Pan.
                                                                                                                                                                                                     Pan troglodytes (chimpanzee)
                                                                                                                                                                                                                                                           sequence.
                                                                                                                                                                                                                                                                                       AG154727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGAGGGAAACAGTCTTTTCCTGCTTCCAGACATGAATCAKGTCACTATTCAATGGGATGC 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGTGGAATTATGTGCTTCAAACAGGTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATATTGCCAAGCAGCAATTAAGAACTGCCAACCAAGGAAACTTCATTTTTATAAAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGTGGAATTATGTGCTTCAAACAGGTTGAA
                                                                                                                                                                                                                                                                                                                                                                       AGTAACCTGTGTCATTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                              AGAGACACTGATATGTGGAAAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATCAAAGAAAGATTTCAAATCACAAGGATTAATAAAACAACAGCTCGGCTTTGGTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATCAAAGAAAGATTTCAAAATCACAAGGATTAATAAAACAACAGCTCGGCTTTGGTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATATTGCCAAGCAGCAATTAAGAACTGCCAAGCAAACTTCATTTTTATAAAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCTGGCCACATCTGGGTAGAACCAGCCACAATTTTTAAGATGGGTATGAATATCTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCTGGCCACATCTGGGTAGAACCAGCCACAATTTTTAAGATGGGTATGAATATCTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTAATAGCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATATAAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTAATAGCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATATAAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGAGGGAAACAGTCTTTTCCTGCTTCCAGACATGAATCATGTCACTATTCAATGGGATGC
                                                                                                                                                                                                                                                                                                                                                          AGTAACCTGTGTCATTTATG
                                                                                                                                                                                                                                                                                                                                                                                                              AGAGACACTGATATGTGGAAAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGA
                                                                 (bases 1 to 628)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mRNA"

/db_xref="taxon:9606"

/tissue_type="normal nasopharynx"

/clone_lib="human nasopharynx"

/note="RSTs generated from a normal
library from southern Chinese"
                                                                                                                                                                                                                                  GI:16684405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17.5%;
                                                                                                                                                                                                                                                                           clone: RP43-018N08.T7,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 499.6; DB 5;
Pred. No. 1.6e-65;
                                                                                                                                                                                                                                                                                                                                                          602
                                                                                                                                                                                                                                                                                                                                                                                   527
                                                                                                                                                                                                                                                                                       628 bp
                                                       Taylor, T.
                                                                                                                         Taylor, T.D.,
  The Institute of Physical Sciences Center (GSC);
                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                        genomic
                                                       .
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nasopharynx
                                                        Yada, T.,
                                                                                                                                                                                                                                                                            Burvey
                                                                                                                                                                                                                                                                                         GSS 09-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 162
                                                                                                                                                                                                                                                                                                                                                                                                                                         507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           87
                                                                                                                                                                                                                                                                                                                                                                                                                582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
```

```
RESULT 7
BF210400
                                          POCAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMMENT
                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2043
                                                                                                                                                                                                                                                                                                                                                            2163
                                                                                                                                                                                                                                                                                                                                                                                                                                                 2103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1743 ACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCTCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               263
                                                                                                                                                                                                                                                                                                                       443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 561;
BF210400 754 bp r 601874484F1 NIH_MGC_54 Homo sapiens mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1-7-22 Suehiro-chou, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (B-mail:chimpbes@gsc.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9170)
Tel:81-45-503-9111, Fax:81-45-503-9170)
Clones are derived from the chimpanzee BAC library RPCI-43 This BAC end was generated during the R&D process and may have higher chance of the tracking errors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LIBRARY
                                                                                                                                                                      AGCTCCATGCCTTTTTAA---TTTTAGCCATTCTTCTGCCTMATTTTCTTAAAATT
                                                                                                                                                                                                                                                           TGTTTCCAGAGTAGTGACA-TTTCTGTGCTCCTACCATCACCATGTAA-GAATTCCCGGG
                                                                                                                                                                                                                                                                                                                                               ACCTAGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTTCTACCAA--TCT
                                                                                                                                                                                                                                                                                                                                                                                                                             AAAATGTATTCACATACAAATCTTCACATGGACACATGTTTTCATTTCCCTTGGATAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTGCAATCTGAACTTGGGTTTTCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTGCAATCTGAACTTGGGTTTTTCCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATAGGATTTCACTCTTGGAAAAGTAGAGCTGTGTGGTCAAAATCAATATGAGAAAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATAGGATTTCACTCTTGGAAAAGTAGAGCTGTGTTGGTCAAAATCAATATGAGAAAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCACTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTTGGAAAGCCACTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGAATCGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTTGGGGATCGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACATACAAAACTCAGTAGAGGAAGGAAACCACCACGCTTTTGGAAAATGATTCACCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCTCCATGCCCTTTTTAATTTTTAGCCATTTCTTCTGCCTCATTTCTTAAAAAT
                                                                                                                                                                                                                                                                                                                       ACCTAGGTAGGGGATTACTGGGCCATATGATAAGCATATGTTTCAGGTCTACCCATCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Vector : pBACe3.6
R.Site 1 : EcoRI
R.Site 2 : EcoRI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequencing: T7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /cell_type="lymphocytes"
/clone_lib="RPCI-43 Chimpanzee Male BAC Library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           organism="Pan troglodytes"

mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   clone="RP43-018N08.T7"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       xref="taxon:9598"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 499.6; DB 1
Pred. No. 1.5e-65;
1; Mismatches 26
                   mRNA linear EST 06-NOV-2000 s cDNA clone IMAGE:4101164 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7;
                                                                                                                                                                                                                                                                            2278
                                                                                                                                                                                                                                                                                                                    502
                                                                                                                                                                                                                                                                                                                                                               2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1802
                                                                                                                                                                                                                                    562
                                                                                                                                                                                                                                                                                                                                                                                                         442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             82
                                                                                                                                                                                                                                                                                                                                                                                                                                                   2162
```

S

8 밁 8 뭐 S 밁 S 밁 Ś

밁 ठ 밁 ક 밁 S 밁

망

371

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
                           S
                                                                            문
                                                                                                                  S
                                                                                                                                                                    밁
                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 564; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                               1083
                                                                              311
                                                                                                                                                                                                                                                       191
                                                                                                                                                                                                                                                                                                                                           131
                                                                                                                                                                                                                                                                                                                                                                                   963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         903
                                                                                                                                                                                                                                                                                                                                                                                                                              71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hominidae; Homo.

1 (bases 1 to 754)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDNA Library Preparation: CLONETECH Laboratories, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.lnl.gov
plate: LLCM972 row: g column: 21
High quality sequence stop: 650.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BF210400
BF210400.1 GI:11103986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGAAT
                      TCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTCCGAA 1262
                                                                                                         CTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATGATCG
                                                                                                                                                                                               TCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCCATCT
                                                                                                                                                                                                                                                                                                    GGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCAGG
                                                                                                                                                                                                                                                                                                                                                                 TCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAAAA 1022
                                                                                                                                                                                                                                                                                                                                                                                                                                AGCCATGTGGAACTGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGAAT
TCTTTGCTGTTATGTTGAATTCTTTTGATTGGGATATTTAACAGATCATTCCGAA
                                                                                   CTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATGATCG
                                                                                                                                                                    TCACATCAAAAGCATTCCAACATGACACGGAATTCTGGGCTAACAGTTGCTTCCATCT
                                                                                                                                                                                                                                                                                                                                             TCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol type="manual" |
/mol type="manual" |
/db xref="taxon:9606"
/clone="IMAGE:4101164"
/tissue_type="from chronic myelogenous leukemia"
/tlab host="DH10B (T1 phage-resistant)"
/clone lib="NIH MGC 54"
/note="Organ: bone marrow; Vector: pDNR-LIB (Clontech);
/site_1: Sfil (ggccgctcggcc); Site_2: Sfil
(ggccattatggcc); Double-stranded cDNA was prepared from cell line RNA. 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     adaptor sequence: 5'-CACGGCCATTATGGCC-3' and 5'-ATTCTAGAGGCCGAGGGCGGCCGACATG-dT(30)BN-3' (where B = A, C, or G and N = A, C, G, or T). Average insert size 1.75 kb (range 0.9-4.0 kb). 15/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo Alto, CA)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 488.4; DB 7
Pred. No. 7.1e-64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ğ
                                                                                 370
                                                                                                                                                                      310
                                                                                                                                                                                                               1142
                                                                                                                                                                                                                                                                                                    1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ng as
and
                                                                                                                              1202
                                                                                                                                                                                                                                                          250
                                                                                                                                                                                                                                                                                                                                               190
                                                                                                                                                                                                                                                                                                                                                                                                                                130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ū
```

```
RESULT 8
BF238439
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 음 성 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ર્ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               431
                                                                                                                                                                                                                                                                                                                                                                                 CDNA Library Preparation: CLONETECH Laboratories, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can I
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM1032 row: e column: 10
High quality sequence stop: 575.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 (bases 1 to 917)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BF238439 איי עני זול
601904735F1 NIH_MGC_54 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BF238439.1 GI:11152359
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mRNA sequence.
BF238439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AC 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AC 1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATCTTCA 1442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -TGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGG-TTTATGAAGATATTCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATTCCTA 1322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCCTGGAGACAAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTCCAGTGAGCAGGT-CTATATGTTGATCCCATTGATTACAGAGATAAAGAAATCTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAATAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAATAATA
                                                                                                                        /db xref="taxon:you /clome="IMAGE:413259" /clome="IMAGE:413259" /clome="IMAGE:413259" /clome="DH10B (T1 phage-resistant)" /lab_host="DH10B (T1 phage-resistant)" /clome lib="NIH MGC 54" /note="Organ: bone marrow; Vector: pDNR-LIB (Clontech); /note="Organ: bone marrow; Vector: pDNR-LIB (Clontech); Site_1: Sfil (ggccgcctcggcc); Site_2: Sfil (ggccgcctcggcc); Double-stranded cDNA was prepared from cell line RNA. 5' and 3' adaptors were used in cloning cell line RNA. 5' and 3' adaptors were used in cloning cell line RNA. 5' and 3' adaptors sequence: 5'-CACGGCCATTATGGCC-3' and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGAACAAAGCTACAGACTACCAGAAGG-GAATACAGGACCCTGGGACAGAGAAT
             3' adaptor sequence:
5'-ATTCTAGAGGCCGAGGCGGCCGACATG-dT(30)BN-3' (where B = A, C, G, or T). Average insert size 1.75 kb (range 0.94.0 kb). 15/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo Alto, CA)."
                                                                                                                                                                                                                                                                                                              /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                  organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                      . 917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDNA clone IMAGE:4132593 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EST 14-NOV-2000
                                                                                                                                               ng as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
```

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 9
BF209716
LOCUS
                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                       JOURNAL COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   583;
                                                                                                                   NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                            Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                              Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                  BF209716.1
                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                         mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                            601874259F1 NIH_MGC_54 Homo
CDNA Library Preparation: CLONETECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                        Hominidae, Homo.
1 (bases 1 to 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTAT 1544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACAAG 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATTCCAG-TGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAAGAAATCTT 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAATAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCACATCAAAAGCATTCCAACATGACACATGGAATTCT-GGGCTAACAGTTGCTTCCATC 1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCAGG 1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGATAACC----GAAATCGCTATTCGAAAATACTACGGTGTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AATCCCAGTTGAGCAGGTCCTATATGTTGATCNCATGATAACGGAGATACACAGAAATTC 608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAATAAT 548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATTCCT 1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTCCGA 1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATGATC 1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAAAA 1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCCATGTGGAACTGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGAAT 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCATCCCAGAAAAAAGGCTACAGACTACAGAAGGGACTACA---GGACCCTGGGGAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTGGGATTACAAGAAGGATCTTA-TGTTAATACCAAAGTGGC-TTATGAAGATATTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTCTTTGCTGTTATGTGGTCAATTCTTTCTTTGATGGGGATATTTAACAGATCATTCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCACATCAAAAGCATTCCAACATGACACGGAATTCTGGGGCTAACAGTTGCTTCCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                    GI:11103302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16.9%;
90.5%;
                                                                                                                                                                                                        820)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 482.6;
Pred. No. 5e-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                     820 bp
                                                                                                                                                                                                                                                                                                                                                                                                              sapiens cDNA clone IMAGE: 4098831 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5e-63;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   50;
                                                                                                                                                                 Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                 Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                     EST 06-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
    Å,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6
```

```
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 16.6%;
Best Local Similarity 86.0%;
Matches 632; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                              2002
                                                                                                                                                                                                                                                                                                                             1828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1409 GATCCCATGATTACAGAGATAAAAGAAATCTTCATCCCAGAACACACAAGCCTACAGACTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1589
                                                                                                                                                                                                                           1887
                                                                                                                                                                            480
                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Plate: LLCM966 row: f column: 16
High quality sequence arcm. ^^^
AAAGTAGAGCTGTGTGGT----CAAAATCAATATGAGAAAGCTGCCTTGCAATCTGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTTTTTCTGTTTCAAGTGTGAATTCACTAAGCAACAATATTTCTTGGAGAATTAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATACTACAGTTGTATATATTCCTGATCTCAACACTGGATATAAACCCCCAAATTTCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGAAGGAGAATACAGGACCCCTGGAGACAAGAGAGACTACCCGCAAAACTCGCTATTCGAC
                                                                                                                                                                                                                                                                                                                                                                                                       CTCATATTAAATCAAGGAGAATGCAGTTCTCCTGACAT-ACAAAACTCAGTAGAGGAGGA 1827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCACCAGTTGATTCCTTAGACTCAGGAAATAATCCCAGGTTACAAAAGCATCCTAATTTT 1708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTCTGCCTGAGGGAAGCCATCTCAGCAATAATAATGAAATTACTTCCTTAACACTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATACTACAGTTGTATATTCCTGATCTCAACACTGGATATAAACCCCCAAATTTCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGAAGGAGAATACAGGATCCCTGGAGACAAGAGACTACCCGCAAAACTCGCTATTCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATCCCATGATTACAGAGATAAAAGAAATCTTCATCCCAGAACACAAGCCTACAGACTAC
                                                                             ATATTTATTTTCCACAAAAATATTTGTGGAAAGCCACTTCAATAGGATTTCACTCCTGGG
                                                                                                            ATACTTATTTTCCACAAAA---TATTTTGGAAAAGCCACTTCAATAGGATTTCACTCTTTGGA
                                                                                                                                                                                                                TTCCTGATGAATTT-GTCTCCTGTTTTGGGGA-TCGTGAATG-AGGAGTTGCCATCTATTA 1943
                                                                                                                                                                                                                                                                            AACCACCATGCTTTGTGGAAAATGATTCACCCAGTGAAACTATTCCAGAACAAGACCTGC
                                                                                                                                                                                                                                                                                                                             AACCACCATGCTTT-TGGAAAATGATTCACCCAGTGAAACTATTCCAGAACAGACCCTGC
                                                                                                                                                                                                                                                                                                                                                                              CTCATATTAAATCAAGGAGAATGCAGTTCTCCTGACATAACAAAACTCAGTAGAGGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCTTTTCTGTTTCAAAGTGTGAATTCACTAAGCAACACAATATTTCTGTGGAGAATTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCACCAGTTGATTCCTTAGACTCAGGAAATAATCCCCAGGTTACAAAAGCATCCTAATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTCTGCCTGAGGGAAGCCATCTCAGCAATAATAATGAAATTACTTCCTTAACA-TTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          quality sequence stop: 608.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note=Torgan: Done marrow; Vector: pDNR-LIB (Clontech);
Site 1: SfiI (ggccgctcggcc); Site 2: SfiI
(ggccgcttatggcc); Double-stranded cDNA was prepared from
cell line RNA. 5' and 3' adaptors were used in cloning as
follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and
3' adaptor sequence:
5'-ATTCTAGAGGCCGACGGCGACATG-dT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size
1.75 kb (range 0.9-4.0 kb). 15/15 colonies contained
inserts by PCR. This library was enriched for full-length
clones and was constructed by Clontech Laboratories (Palo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /tissue_type="from chronic myelogenous leukemia"
/lab_host="DH10B (T1 phage-resistant)"
/clone_lib="NIH_MGC_54"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 clone="IMAGE:4098831"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ω.
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 474.2; DB 7;
Pred. No. 9.6e-62;
0; Mismatches 88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  820;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                            2057
                                                                             599
                                                                                                                         2001
                                                                                                                                                                                                                                                                                                                             1886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1528
                                                                                                                                                                            539
                                                                                                                                                                                                                                                                            479
                                                                                                                                                                                                                                                                                                                                                                              419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1468
```

밁 8 맑 S 밁 S 밁 δ 밁 ঠ 밁 8 뭐 S 밁 Ş 밁 S 밁

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 10
BF238869
                             ঠ
                                                                                 밁
밁
                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           POCUS
                                                                                                                                                                      Matches
                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2118 ACAAATCTTCACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2058 TGGGTTTTCCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGAAAAAAATGTATTCACAT 2117
128
                                        963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              600 CAAAGTAGAGCCTGTGGTGGTCACAACATCCAATATGAGAAAAGCTGCTGAATCTGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     717 CTTCCTTGCCÁCÁTG
                                                                                 8
                                                                                                                                                                      544;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hominidae; Homo.

1 (bases 1 to 823)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDNA Library Preparation: CLONETECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.B. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can found through the I.M.A.G.B. Consortium/LLNL at: http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BF238869.1 GI:11152790
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BF238869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mRNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601904492F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4132295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Plate: LLCM1031 row: h column:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                        TCTACTTGGAGCCAAACATTAAGTACGTAT-TTCAAGTGAGATGTCAAGAAACAGGCAAA 1021
  TCTACTTGGAGCCAAACATTAAGTACGTATCTTCAAGTGAGATGTCAAGAAAACAGGCAAA
                                                                                 AGCCATGTGGAACTGTTAAAGAATTTGACACCAATTTTACATATGTGCACCAGTCAGAAT 127
                                                                                                                              ACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGG---TTCCCTGCAATAGAATTGGATCTGGCTCCTTCGCACACCTGTTTCCCCTTCACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           quality sequence stop: 584.
                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                            C, or G and N = A, C, G, or T). Average insert size 1.75 kb (range 0.9-4.0 kb). 15/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palt Alto, CA)."
                                                                                                                                                                                                                                                                                                                                                                                                                        /tissue_type="from chronic myelogenous leukemia"
/lab host="PH10B (T1 phage-resistant)"
/clone_lib="NIH_MCC_54"
/note="Organ: bone marrow; Vector: pDNR-LIB (Clontech);
Site_1: Sfil (ggccgcctcggcc); Site_2: Sfil
(ggccattatggcc); Double-stranded cDNA was prepared from cell line RNA. 5' and 3' adaptors were used in cloning follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and adaptors were contact.
                                                                                                                                                                                                                                                                                                                                                                               3' adaptor sequence:
5'-ATTCTAGAGGCCGAGGCCGACATG-dT(30)BN-3' (where B = A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        b_xref="taxon:9606"
lone="IMAGE:4132295"
                                                                                                                                                                                        15.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . 823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2132
                                                                                                                                                                    0,
                                                                                                                                                                                      Score 448.8; DB 7
Pred. No. 6.5e-58;
                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24
                                                                                                                                                                                                               DB 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mRNA
                                                                                                                                                                                                               Length
                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                     Laboratories (Pàlo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EST 14-NOV-2000
                                                                                                                                                                    8
                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ď,
                                                                                                                                                                                                                                                                                                                                                                                                                                 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          716
                                                                                                                              962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                659
```

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 11
CC496590
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  188
                                                                                                                                                                                                                                                                                                                                                        l (bases 1 to 825)
Holt, R., Stott, J., Yang, G., Barber, S., Smailus, D., Prabhu, A.-L.,
Tsai, M., Cloutier, A., Lee, D., Girn, N., Olson, T., Mayo, M.,
Butterfield, Y., Kirkpatrick, R., Liu, J., Guin, R., Chan, A., Chiu, R.,
Mathewson, C., Wye, N., Masson, A., Brown-John, M., Jones, S.,
Schein, J., Marra, M., de Jong, P., McWilliam, S., Barris, W.,
Dalrymple, B.P. and Tellam, R.
Bovine BAC End Sequences from Library CHORI-240, PLATES 294 to 398
British
Plate: 3
              Email: rholt@bcgsc.ca
Clones are derived from the bovine BAC library CHORI-240
(http://www.chori.org/bacpac/bovine240.htm). For BAC library
(http://www.chori.org/bacpac/bovine240.htm). For BAC library
availability, please contact Pieter de Jong (pdejong@mail.cho.org).
Clones may be purchased from BACPAC Resources
(http://www.chori.org/bacpac/ordering_information.htm). This work
was undertaken as part of the International Bovine BAC Mapping
Consortium (IBBMC) by CSIRO Livestock Industries, Australia and the
British Columbia Genome Sciences Centre, Canada.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CC496590 825 bp DNA 1i
CH240_332J15.TARBAC13P2 CHORI-240 Bos taurus
CH240_332J15, genomic survey sequence.
CC496590
CC496590.1 GI:31811154
GSS.
                                                                                                                                                                                                                                                                                                  Unpublished (2003)
Other_GSSs: CH240_332J15.T7
Contact: Rob Holt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bos taurus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Ruminantia;
Pecora; Bovidae; Bovinae; Bos.
                                                                                                                                                                                                  The British Columbia Cancer Agency Genome Science Centre 600 W. 10th Ave, Vancouver, British Columbia, Canada V5Z Tel: 604-877-6085
Fax: 604-877-6276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bos taurus (cattle)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGTACTGGCAGCCTTGGAGTTCACCGTTTTTCATAAAACACCTGAAACAGTTCCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCAT-CCAGAACACAAGNCTACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCATCCCAGAACACAAGCCTACAGA 1464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATAATTCCAGTGAGCAGGT-CTATATGTTGATCCCATGATTACCGAGAT-AAAGAAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATA-GTGAACTTATGAATA 1379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGG-TTTATGAAGATATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTTATGAAGATATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGTCTTTGCTGTTATGTGGTCAATTCTTTCTTTGATGGGGATATTTAACAGATCATTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GSS 17-JUN-2003
c clone
                                                                                                                                                                                                                                              4E6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            427
RESULT 12
BQ228535
LOCUS
                                                                                                                                     Ş
                                                                                                                                                                                 밁
                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                              용
                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 545; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                      1967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1430 AAAGAAATCTTCATCCCAGAACACAAGCCTACAGACTACAAGAAGG---AGAATACAGGA 1486
                                                                                                                                                                                                                       2027
                                                                                                                                                                                                                                                                                                                                                                                      1907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1607
                                                                                                                                                                                                                                                                                                                                              492
                                                                                                                                                                                                                                                                                                                                                                                                                             432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Seq primer: SP6
Class: BAC ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACTCAGGAAATAATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTTCTGTTTTCAAGT 1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCCCTGGAGACAAGAGACTACCCGGCAAAACTCGCTATTCGACAATACTACAGTTTGTATAT 1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATGCATTACTGAATGAAACTATTCCAGAACAAACTCTGCTGCCTGATGAATTTGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAATTCACTAAGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGA 1786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AACTTGGGAAACAATGCCAAGTTTAAAAAATATCCTGATTTTTGCTTTTTTCTGTCTCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTCCTGATCTCAACACTGGGTATAAACCCCCAGATTTCAAGTTTTCTCCCCTGGGGGAAAC
                                                                                                      GCCCAATTTTTTTTAATTAGAGAATTAAGATCCAAA
                                                                                                                                                                                                                                                                                        TTGGAAAGCCACTTCAATAGGATTTCACTCTTGGAAAAGGTAGAGCTGTGTGGTCAAAATC
                                                                                                                                                                                                                                                                                                                                                                       TGTTTGGGGATCGTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATGATTCACCCAGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTTGTCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACABATTCACTAAGCAACACACTATTTCTTGAAGAATTAAACCTCATTTTAAATCAAGGA 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATCTCAGCAATGATGAAACAGCTTCCTCAATTCTGGAACCACCAGCTGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATCTCAGCAATAATAATGAAATTACTTCCTTAACACTTAAACCACCACCAGTTGATTCCTTA 1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTCCTGATCTCAACACTGGATATAAACCCCAAATTTCAAATTTTCTGCCTGAGGGAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCCTGGAGAGAAAAGAGAGACCTGGAGAAATCACTACTCACCGACCCTACAGTTGTTTAT 131
                                                                                                                                            CTGCCTCTTTTTGAAAAAATGTATTCACATACAAA 2122
                                                                                                                                                                                                          AATATGAGAAAGCTGCCTTGCAATCTGAACTTGGGTTTTCCCTGCAATAGAAATTGAATT
                                                                                                                                                                                                                                                                                                                                              TGTTTGGGGAGCATGAACAAAGAGTTGCCATCTATTAATTCTTACTTTCCACAAAATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAATGCAGTCCTCCGGACATGCAAAAACTCAATAGAGGGGGAAAACTGCCATGCTTCTGGAA 431
                                                                                                                                                                                                                                                                 TTGGAAAGCCACTTCAATCGGATTTCACTCTTACAAAAGTAGATTTGTGTAGTCA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /ceil_type="Blood"
/clone lib="CHORI-240"
/clone lib="CHORI-240"
/note="Vector: pTARBACL.3; Site 1: MboI; Site_2: MboI;
Hereford bull L1 Domino 99375; CHORI-240 Bovine BAC
library (Male) produced by Pieter de Jong"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /sex="Male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Bos taurus"
/mol_type="genomic DNA"
/strain="breed: Hereford"
/db_xref="taxon:9913"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                   - AAAGCTGCCTTGCAATCTGAAGAGGGCTCTCTCTCAACACAAATTTAATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone="CH240_332J15"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 428; DB 12;
Pred. No. 8.9e-55;
0; Mismatches 135
      916
    å
      mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 135;
                                                                                                      694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        825;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16;
      EST
        02-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
```

71

2

191

311

251

491

1906

2026

909

유 성

ð

중 유

문

ð

음 성 음

र् 밁 ક 밁

```
ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
                                                                        र्
                                                                                                                                                  ঠ
                                                                                                                                                                                         망
                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ई
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 512;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                 1438
                                                                                                                                                                                                                                                                                                                                                                                                                    1378 TAATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1318 TCCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAA 1377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1258 CCGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATAT 1317
                                                                                                                                                                                                                                                                                       401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hominidae; Homo.

1 (bases 1 to 916)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA Library Preparation: Life Technologies, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov Tissue Procurement: ATCC/DCTD/DTP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGENCOURT 7594648 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:60615045', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          High quality sequence stop: 554.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Plate: LLAM13331 row: h column: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BQ228535
BQ228535.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
ATAATCCCA-GGTTACAAAAGCATCCTAATTTTTGCTTTTTCT---GTTTCAAGTGTGAAT 1732
                                                               TAATAATGAAATTACTTCCTTAACACTTAAACCCACCA-GTTGATTCCTTAGACTCAGGAA 1676
                                                                                                                                                CAACACTGGATATAAACCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAA
                                                                                                                                                                                                                                            AAGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCT
                                                                                                                                                                                                                                                                                                                                 CTTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mRNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone="IMAGE:6061504"
/tissue_type="melanotic melanoma"
/tissue_type="melanotic melanoma"
/lab host="DH10B (phage-resistant)"
/clone_lib="NIH_MGC_72"
/note="0rgan: skin; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: Sall; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 2 kb. Library constructed by Life Technologies."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       _xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         _type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 424.8; DB 3
Pred. No. 2.6e-54;
0; Mismatches 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 916;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                               1617
                                                                                                                                                                                                                                                1557
                                                                                                                                                                                                                                                                                                                                 1497
                                                                                                                        580
                                                                                                                                                                                                      520
                                                                                                                                                                                                                                                                                       460
                                                                                                                                                                                                                                                                                                                                                                          400
                                                                                                                                                                                                                                                                                                                                                                                                                    1437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                280
```

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 13
BF239183
LOCUS
                         S
                                                                         망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                    Query Match
Best Local S
Matches 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                             Local Similarity
                              963
                                                                                                                                                                      419;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDNA Library Preparation: CLONETECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.B. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov plate: LLCM1034 row: g column: 22 High quality sequence stop: 502.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601905584F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4133421 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hominidae, Homo.
1 (bases 1 to 513)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mRNA sequence
TCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAA--CAGGCAA 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAATGCAGTT 1796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  T--CACTAAGCAACACAATATTTCTT--GGAGAATTAAGCCTCAT--ATTAAATCAAGGA 1786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATAATCCCAGGGTTACAAAAGCATCCTAAATTTTGCTTTTTTCTGGTTCCAAGGGGGAAT 700
                                                                           AGCCATGTGGAACTGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGAAT
                                                                                                    ACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAATGCAGTT 770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTCCCTAAGCCAACCCAATATTTCTTTGGAGAAATTAAGCCTCCTTATTAAATCCAGGGA 760
                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                       /note=Torgan: bone marrow; Vector: pDNR-LIB (Clontech);
/note=Torgan: bone marrow; Vector: pDNR-LIB (Clontech);
/site 1: SfiI (ggccgccrcggcc); Site 2: SfiI
(ggccattatggcc); Double-stranded cDNA was prepared from
cell line RNA. 5' and 3' adaptors were used in cloning as
follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and
3' adaptor sequence:
5'-ATTCTAGAGGCCGAGCGGCGACATG-dT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size
1.75 kb (range 0.9-4.0 kb). 15/15 colonies contained
inserts by ECR. This library was enriched for full-length
clones and was constructed by Clontech Laboratories (Palo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone="IMAGE:4133421"
/tlssue_type="from chronic myelogenous leukemia"
/lab host="DH10B (T1 phage-resistant)"
/clone_lib="NIH_MGC_54"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .513
                                                                                                                                                                                             12.4%;
                                                                                                                                                                 Score 353; DB 7;
Pred. No. 2.1e-43;
0; Mismatches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             513 bp
                                                                                                                                                                                                                 Length 513;
                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EST 14-NOV-2000
                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              þe
                                                                                                                           962
                                                                                                                                                                      'n
```

207 892 267 772

387

327

507

447

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 14
CB429984/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ર્શ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Snoo
                     Query Match
Best Local Similarity
Matches 393; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   133
                                                                                                                                                                                                                                                                                                                                                                                                 Tel: 402 762 4366
Fax: 402 762 4390
Email: smith@email.marc.usda.gov
Single pass sequencing. Bases called with phred v0.020425.c and trimmed with the aid of the trim_alt option. Vector identified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Wray, J.E. and Keele, J.W. Bchternkamp, S.E., Chitko-McKown, C.G., Wray, J.E. and Keele, J.W. A second set of bovine ESTs from pooled-tissue normalized libraries Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               720
605838 MARC 6BOV Bos taurus
CB429984
                                                                                                                                                                                                                                                                                                                                               cross match v0.990329.
Plate: FQY8023 row: G column: 9
Seq primer: TAGAAGGCACAGTCGAGG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USDA, ARS, US Meat Animal Research Center
PO Box 166, Clay Center, NE 68933-0166, US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Ruminantia;
Pecora; Boyidae; Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: Smith TPL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bos taurus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bos taurus (cattle)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CB429984.1 GI:29205578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGATCGTCTTTGCTGTTAIGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATCTCTACAGGGCACCTTACTTCTGACAACAGAGGGAGAC--ATTGGACTTTTATTGGGA 1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGGTCACATCAAAAGCATTCCAA-CATGACACATGGAATTCTGGGCTAACAGTTGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTCCTAATATGAAAAGAAGC 513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTCCTAATATGAAAAACAGC 1336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTCCGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCCGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGAT 1315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGATCGTCTTTGCTGTTATGTTCAATTCTTTCTTTGATTGGGATATTTAACAGATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACCATTTGGACTTTTATTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGGTCACATCAAAAGCATTCCAAGCATGACACATGGAATTCTGGGCTAACAGTTGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGGTACTGGCAGCCTTGGAAGTTCACCGTTGTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGGTACTGGCAGCCTTGG-AGTTCACCGTT-TTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCCAGAAAACAGGCAAA 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 720)
                       Conservative
                                                                                                                                                                       /mol_type="mRNA"
/db_xref="taxon:9913"
/tissue_type="pooled"
/lab_host="DH10B"
/clome_lib="MARC_6BOV"
/note="Vector: pcDNA3.1
                                                                                                                   /note="Vector: pcDNA3.1; Site 1: EcoRI; Site 2: NotI; Library made with RNA pooled from multiple tissues including liver, lung, hypothalamus, pituitary, and placenta/endometrium."
                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                             organism="Bos taurus"
                                     12.1%;
                     :
                     Score 345.6; DB 4;
Pred. No. 2.5e-42;
1; Mismatches 80;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0 bp mRNA linear cDNA 3', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         68933-0166, USA
                                                           Length
                                                           720;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST
                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-MAR-2003
                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1078
                                                                                                                                                                                                                                                                                                                                                                                                               with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           252
                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 15
BF212748
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 626
                                                                                                                                                                                                                                                                     CDNA Library Preparation: CLONETECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.lnl.gov
                                                                                                                                                                                                                                                                                                                                                                                     Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601813991F1 NIH_MGC_54 Homo mRNA sequence.
                                                                                                                                                                                                           Plate: LLCM878 row: f column: 23
High quality sequence stop: 540.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BF212748.1 GI:11106334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BF212748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCAAACGCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTACAACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATAATTTATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGGTACATGTGAAGAGTTTAGAGACAGAAGAAGAAGACAGTATCTCACCTCAAGCTAT 652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTTTTAAGATGGATCCACCAGATGTACTTGACAAAGTAGCCTGTGTAATTTATGAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATACAACCAAACTTGGAACGTAAGCTAAATTTACTTTCCTTTTACATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTAATCCACTGGGATAGTCAAACATCAATTGAAAAAGTTTCCTGTGAAATGAGATACAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATACCTTCTGCATCCATTATTTCCAGGGCTGAGGATATAAATACTACAGTGTCCAAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATACCTTCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCANATGTTCTGGGCATGGAGAAGTCGAAACAACTACAAATTCATCTGGACGATATAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTAACATCTCCACTGATTCATTGCAAAAGGCCAAGAAGTATTTGGTTTTGGTCCAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTAACATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTTGGGTCCAAGCA 712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGGTGTACGTGAAGAGTTTAGAGACAGAAGAAGAAGAAGAATATCTCACTTCAAGTTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTGGCAACATGACTTGTACCTGGAACCATGGGAGGCCCACTTACATAGACACAAAGTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCAGGCAACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTTCTTCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTGTCATTTATGAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 540)
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxna"
/db_xref="taxna"
/clone="IMAGE:4048150"
/tissue_type="from chronic myelogenous leukemia"
/tissue_type="from chronic myelogenous leukemia"
/tlab_host="hH10B (Tl_phage-resistant)"
/clone_lib="NIH_MGC_54"
/clone_lib="NIH_MGC_54"
/note="forgan; bone marrow; Vector: pDNR-LIB (Clontech);
Site_l: SfiI (ggccgcttcggcc); Site_2: SfiI
(ggccattatggcc); Double-stranded cDNA was prepared from
                                                                                                                                                                                                   .540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chordata; Craniata; Vertebrata; Euteleostomi; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       bp mRNA linear EST 06-NOV-2000 sapiens cDNA clone IMAGE:4048150 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               946
                                                                                                                                                                                                                                                                                                                     BQ
```

```
Query Match 11.1%;
Best Local Similarity 88.8%;
Matches 390; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1611
                                                                                                                                                                                                                        1551
                                                                                                                                                                                                                                                                  1668 ACTCAGGAAATAATCCCAG 1686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1371 TTATGAATAATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAA 1430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1317 TTCCTAATATGAAAAACAGCAATGTTGTG-----AAAATGCTACAGGAAAATAGTGAAC 1370
                                                                                                                                                                            403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        163 ATTĆCTAGATATAGAAAAACGAGCAAGTGTGTGGTGAAAAGTGCTACAGGAAAATAGTGAAC
                                                                                        TCAGCAATAATAATGAAATTACTTCCTTAACACTTTAAGACAACCAGTTTGATTCCTTAG
                                                                                                                  TCAGCAATAATGAAATTACTTCCTTAACACTTAAA---CCACCAGTTGATTCCTTAG
ACTCAGGAAATAATCCCAG 540
                                                                                                                                                                            CTGATCTCAACACTGGATATAAACCCCCAAATGTCAAATTCTCTG-CTGAGGGAAGCCATC
                                                                                                                                                                                                          CTGATCTCAACACTGGATATAAACCCCAAATTTTCAAATTTTCTGCCTGAGGGAAGCCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cell line RNA. 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence: 5'-ATTCTAGAGGCCGACGACGATG-dT(30)BN-3' (where B = A, C, Or G and N = A, C, G, Or T). Average insert size 1.75 kb (range 0.9-4.0 kb). 15/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 316.2; DB 7; Length 540;
Pred. No. 7.2e-38;
0; Mismatches 38; Indels 11; Gaps
                                                                                                                                1667
                                                                                                                                                                                                                           1610
                                                                                                                                                                                                                                                                                                                 1550
                                                                                        521
                                                                                                                                                                            461
                                                                                                                                                                                                                                                                     402
                                                                                                                                                                                                                                                                                                                                                                                                                                                      282
```

S

ORIGIN

Search completed: October 14, 2006, 16:18:17 Job time : 13055 secs

밁

중 음 중

음 성

음 성

유

This Page Blank (uspto)

¢ -.

```
Run
                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                Database
                                                                                                                                                                                                                                                                                                                Minimum
                                                                                                                                                                                                                                                                                                                                                                         Searched:
                                                                                                                                                                                                                                                                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                            sequence:
                                                                                                                                                                                                                                                                                                   Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 on:
                                                                                                                                                                                                                                                                                                 B B
                                                                                                                                                                                                                                                                                                seq length: 0
seq length: 2000000000
 9:
10:
11:
12:
13:
15:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 October 14, 2006, 12:13:19 ; Search time 1718 Seconds (without alignments)
11602.828 Million cell updates/sec
                                                                                                                                                                                   2 1 2
                                                                                                                                                                                                                                                                                                                                                                                                IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-667-289-1
2857.4
                                                                                                                                                                                                                                                                                                                                                                       5244920 seqs, 3486124231 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                            Copyright
                                                                                                                                                                                                                Geneseq_8:*
                                                                     geneseqn2003as:*
geneseqn2003bs:*
geneseqn2003cs:*
                                                                                                                                                                    geneseqn1980s:*
geneseqn1990s:*
geneseqn2000s:*
                                                                                                              geneseqn2002as:*
geneseqn2002bs:*
                                                                                                                                        geneseqn2001as:*
geneseqn2001bs:*
geneseqn2004bs:*
geneseqn2005s:*
geneseqn2006s:*
                                         geneseqn2003ds:*
geneseqn2004as:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GenCore version 5.1.9
(c) 1993 - 2006 Biocceleration
                                                                                                                                                                                                                                                                                                                                              10489840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ltd
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No. 1 2 3 3	Score 2857.4 2857.4 2857.4 2857.4 2810.2	Query Match 100.0 100.0 100.0	Query Query Match Length DB 100.0 2859 6 100.0 2859 1 100.0 2859 1 98.3 2830 6	DB 13	ID AAK98257 ADS73604 AER51089 AAD38773	Description Aak98257 Human DNA Adb73604 Human IL Ade73609 Human IL Aea51089 Human hae
. UT 2	2081.4	72.8	2123	ഗര	AAF87820	Aaf87820 Human hae
7	1887.6	66.1	1890	14	ADV43392	Adv43392 Human psy
8	1493.6	52.3	1698	σ	AAD38774	Aad38774 Human hae
9	1379	48.3	1887	0	AAK98258	
10	1322.8	46.3	1479	տ	AAF87819	
11	1236.6	43.3	1301	ഗ	AAF87821	Aaf87821 Human hae
12	1140.6	39.9	1155	4	AAC88149	Human
13	1140.6	39.9	1155	10	ADC07176	Adc07176 DNA encod
14	1140.6	39.9	1155	14	ADZ65011	Adz65011 DNAX cyt
15	1105.8	38.7	1935	0	AAD38777	Aad38777 Mouse hae
16	1043.4	36.5	1071	0	AAD38775	Aad38775 Human hae
17	1039.2	36.4	1784	ហ	AAF87818	Human
18	846.2	29.6	1152	4	AAC88150	Aac88150 Human DN

					Ω			a					۵			α										
5	44	43	42	41	6	39	8	37	8	5	34	ຜ	2	μ	ö	29	8	27	26	25	24	23	22	21	8	19
245.4	245.4	245.6	246.6	246.8	246.8	247	247	247	247.4	247.4	247.8	247.8	248	248.2	248.4	248.6	248.6	248.6	248.6	253	253.4	253.4	253.4	254	846.2	846.2
8.6	8.6	8.6	8.6	8.6	8. 6	8.6	8.6	8.6	. 7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.9	8.9	8.9	8.9	8.9	29.6	29.6
118067	118067	338702	276276	110000	38732	188971	81001	37262	110000	110000	110000	8259	30652	270150	212231	44567	44567	44567	31741	601	144034	143776	98844	36871	1152	1152
12	12	11	#	14	14	12	4.	11	10	10	14	12	14	11	H	10	ø	œ	v	13	13	13	7	13	14	10
ADI37256	ADF13110	ACN44042	ACN44350	ADZ12821_3	ADZ12821_4	ADL08108	AAF30035	ACN43890	ABZ79565_3	ADG70447_3	AED34666_1	ADN41778	AEB94744	ADP65796	ACN44598	ADB72218	ADA02479	AAD56117	ABA21231	ADV15840	ADV15294	ADV15288	ADJ84099	ABD33508	ADZ65013	ADC07178
Adi37256 Hypermeth		Acn44042 Human gen	Acn44350 Human gen	Continuation (4 of	Continuation (5 of	Adl08108 Human gen	Aaf30035 Human apo	Acn43890 Human gen	Continuation (4 of	Continuation (4 of	Continuation (2 of	Adn41778 Novel hum	Aeb94744 Human eIF	Adp65796 Human 16p	Acn44598 Human gen	Adb72218 Human BAT	Ada02479 Human BAT	Aad56117 Human BAT	Aba21231 Human ner	Adv15840 Human ost	Adv15294 Human ost	Adv15288 Human ost	Adj84099 Human WRN	Abd33508 Human can	Adz65013 Reverse t	Adc07178 Human DNA

ALIGNMENTS

Human; DNAX cytokine receptor subunit 5; DCRS5; II30 receptor; immune response; DCRS; p40/II-B30 ligand; cell physiology modulation; cell development modulation; TH1-mediated disease; multiple sclerosis; rheumatoid arthritis; osteoarthritis; inflammatory bowel disease; diabetes; psoriasis; sepsis; allogenic transplant; recipient; TH2 response; tumour; viral growth; fungal growth; vaccine; Human DNAX cytokine receptor subunit 5 (DCRS5) cDNA sequence. AAK98257; AAK98257 standard; cDNA; 2859 allergic response; gene; ss. 28-MAY-2002 (first entry) ВP

RESULT 1
AAKS927
ID SAES
XX AAKS
XX AAKS
XX AAKS
XX AAKS
DT 28-M
DE Huma
XX Huma
XX Huma
XX TH2
XX T misc_feature mat_peptide misc_feature sig_peptide Homo sapiens. /product= "DCRS5 protein" /transl except= (pos:125... /note= "Xaa= Gln or His" /transl except= (pos:563... /note= "Xaa= Arg or Gly" /*tag= 'C // note= 'I' the base at this position is G (encoding Gln), the base at position 563 is also G (encoding Gly). If the base at this position is T (encoding His) the base at position 563 is A (encoding Arg)" /*tag= 127 /note= "Mature DCRS5 protein"
563 119. .187 Location/Qualifiers /*tag= *tag= *tag= ø ۵ .545, aa:Xaa) .127, aa:Xaa)

360

```
ð
                                                                                                                                                                                                                                                                                                                                                                                                                     ક
                                                                                            밁
                                                                                                                          ફ
                                                                                                                                                                                 S
                                                                                                                                                           밁
                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                             엉
                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present cDNA sequence encodes the human DNAX cytokine receptor subunit 5 (defined as DCRS5 or II30 receptor) of the invention, DCRS5 is a member of the class I branch of the cytokine receptor superfamily and is closely related to the II-6 receptor subunit gp130 and the II-12R-Beta c-2 subunit. Cytokines are soluble molecules which play a critical role in controlling the complex cellular interactions of the immune response. The invention comprises novel receptors related to cytokine receptors designated DNAX cytokine receptor subunits (DCRS). Specifically the convention comprises a subunit (DCRS5) for a receptor complex for the p40/II-B30 ligand. The DCRS5 proteins of the invention are useful for treating diseases or disorders associated with abnormal expression or abnormal triggering of response to the p40/II-B30 ligand. The proteins of the invention can be used to modulate the physiology or development of a cell from a host which exhibits THI-mediated disease; multiple sclerosis; chalametory bowel disease; subcrease; sepsis; an allogenic transplant recipient; chronic allered receptors.
                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 2859; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel DNAX cytokine receptor subunit 5 polypeptide which is subunit of receptor complex for p40/IL-B30, useful for treating conditions associated with abnormal expression or triggering of response to p40/IL-
                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2859 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 18; Page 9-12; 74pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 allergic response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B30 ligand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-MAY-2000; 2000US-0203426P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (SCHE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2002-062238/08.
DB; AAO14008.
   301
                                                                                               181
                                                                                                                             181
                                                                                                                                                              121
                                                                                                                                                                                          121
                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                        μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Z,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SCHERING CORP
                                                                                                                                                                                 GAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGGTG
   TTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAACC
                                                                                                                  TCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACAAT
                                                                                                                                                              GAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTTACATACTCTTCAGCTGGTG
                                                                                                                                                                                                                          GGAATTATGTGCTTCAAACAGGTTGAAAGAGGGAAACAGTCTTTTCCTGCTTCCAGACAT
                                                                                                                                                                                                                                            GGAATTATGTGCTTCAAACAGGTTGAAAGAGGGGAAACAGTCTTTTCCTGCTTCCAGACAT
                                                                                                                                                                                                                                                                                         GTGGTACGGGAATTCCATTGTGTTGGGCAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGT
                                                                                                                                                                                                                                                                                                         GTGGTACGGGAATTCCATTGTGTTGGGCAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kastelein RA,
                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001WO-US015057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "If the base at this position is G (encoding Gly), the base at position 127 is also G (encoding Gln). If the base at this position is A (encoding Arg) the base at position 127 is T (encoding His)"
                                                                                                                                                                                                                                                                                                                                                                                                                   929 A; 575 C; 560 G; 791 T; 0 U; 4 Other;
                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                                                                                                                                                                                   .0%; Score 2857.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Moore
                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ₹,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Parham
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     G
                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                     6
                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                     2859;
                                                                                                                                                                                                                                                                                                                                                      ٥,
                                                                                                                                                                                                                                                                                                                                                      Gaps
   360
                                                                300
                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                        60
                                  300
                                                                                               240
                                                                                                                                                              180
                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              몆
                  Ş
                                                                          8
                                                                                                              밁
                                                                                                                                         ð
                                                                                                                                                                                                    S
                                                                                                                                                                                                                                          뭐
                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                 밁
                                                                                                                                                                            밁
                                                                                                                                                                            1201
                                                                                                                                                                                                             1201
                                                                                                                                                                                                                                            1141
                                                                                                                                                                                                                                                                        1141
                                                                                                                                                                                                                                                                                                        1081
                                                                                                                                                                                                                                                                                                                                         1081
                                                                                                                                                                                                                                                                                                                                                                        1021
                                                                                                                                                                                                                                                                                                                                                                                                      1021
                                                                                                                                                                                                                                                                                                                                                                                                                                     961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGGAAACTTCATTTTATAAAAATGGCATCAAAGAAGATTTCAAATCACAAGGATTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTACTG
TAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATCTT
                                                                     TAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAATAA
                                                                                                                                  AACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATTCC
                                                                                                                                                                                                 CGTCTTTGCTGTTAIGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTCCG
                                                                                                                                                                                                                                                             CTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATGAT
                                                                                                                                                                                                                                                                                                                          GGTCACATCAAAAGCATTCCAACATGACACGTGGAATTCTGGGCTAACAGTTGCTTCCAT 1140
                                                                                                                                                                                                                                                                                                                                                                                         AAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAA 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAACCAAACTTTGGAATGTTAAAGAATTTTGACACCAATTTTACATATGTGCAACAGTCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAGCAAACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTACTG
                                                 TAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAATAA
                                                                                                                                                                                                                                            CTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATGAT
                                                                                                                                                                                                                                                                                                         GGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCCAT
                                                                                                                                                                                                                                                                                                                                                                        AAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTGGGATAGTCAAACAACTAGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAACAT
                                                                                                                                                                             CGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                       1020
```

1080

960 960 900 900 840

780 780 720 720 660 660 600

600

540

540 480 480 420

840

1080

1200

```
2461
                                                                                                            2341
                                                                                                                                                                                                                              2221
                                                                                                                                                                                                                                                           2221
                                                                                                                                                                                                                                                                                                                   2161
                                                                                                                                                                                                                                                                                                                                               2101
                                                                                                                                                                                                                                                                                                                                                                            2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1501
                                                                                                         GGTCCCGAAGGTGGAACATGCTTCATGGTCACACATACAGGCACAAAAACAGCATTATGT
                                                                                                                                                                                                                                                                                                                                                          AAAAAATGTATTCACATACAAATCTTCACATGGACACATGTTTTCATTTCCCTTGGATAA
                                                                                                                                                                                                                                                                                                                                                                                                                      GCCTTGCAATCTGAACTTGGGTTTTCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATGCAAAACAGCTCTCTATTGTGTACAGAAAGGGTAAATAATGCAAAATACCTGGTAGT
             GATGCAAAACAGCTCTCTATTGTGTACAGAAAGGGTAAATAATGCAAAATACCTGGTAGT
                                                   CTCCATGCCTTTTTAATTTTAGCCATTCTTCTGCCTMATTTCTTAAAATTAGAGAATTAA
                                                                                                                                                                                                                           TGTTTCCAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAG
                                                                                                                                                                                                                                            TGTTTCCAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAG
                                                                                                                                                                                                                                                                                      ATACCTAGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTTCTACCAATCT
                                                                                                                                                                                                                                                                                                     ATACCTAGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTTCTACCAATCT
                                                                                                                                                                                                                                                                                                                                               AAAAAATGTATTCACATACAAATCTTCACATGGACACATGTTTTCATTTCCCTTGGATAA
                                                                                                                                                                                                                                                                                                                                                                                                         GCCTTGCAATCTGAACTTGGGTTTTCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAATAGGATTTCACTCTTGGAAAAGTAGAGCTGTGTGGTCAAAATCAATATGAGAAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAATGAGGAGTTGCCATATTAATACTTATTTTCCACAAAATATTTTGGAAAAGCCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTTGGAAAGCCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGACATACAAAACTCAGTAGAGGAAGGAAACCACCATGCTTTTGGAAAATGATTCACCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGACATACAAAACTCAGTAGAGGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAGAATGCAGTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGTGTGAATTCACTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACTGGATATAAACCCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CACTGGATATAAACCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGGAGAATACAGGACCCCTGGAGACAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATCTT
                        2520
                                                    2460
                                                                                 2460
                                                                                                                                        2400
                                                                                                                                                                    2340
                                                                                                                                                                                                 2340
                                                                                                                                                                                                                              2280
                                                                                                                                                                                                                                                         2280
                                                                                                                                                                                                                                                                                      2220
                                                                                                                                                                                                                                                                                                                   2220
                                                                                                                                                                                                                                                                                                                                              2160
                                                                                                                                                                                                                                                                                                                                                                           2160
                                                                                                                                                                                                                                                                                                                                                                                                         2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                               2040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1440
                                                                                                            2400
                                                                                                                                                                                                                                                                                                                                                                                                                                    2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1560
```

Ş

8 8 8 8 8 8 8

중 유

5 B 5

음 성 음

8 8 8

음 성

유 성

음 성 음 성

문

중 음 중

유영

S 문

```
RESULT 2
ADS73604
ADS73604
ADS73604
ADS73604
ADS73604
AC ADS7
XX ADS7
XX B3;
CH Huma
XX B3;
XW GFV;
XW annix
XW annix
XW annix
XW repr
XX ADS7
XX ADS7
XX B3;
XX WAD1,
XX WP1;
XX Modu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                            ss; gene; human; interleukin 23; subunit p19; IL-23; IL-23p19; tumour; growth; agonist; antagonist; receptor; cancer; anticen-binding site; antibody; extracellular region; antiene nucleic acid; small interference RNA; takRNA; polyclonal; monoclonal; humanized; Fab; Fv; F(ab')2; peptide mimetic; colon; ovarian; breast; melanoma; cachexia; anorexia; angiogenesis; gastrointestinal tract; respiratory tract;
                                                                                                                                                                                                                                                                                                                                                           Homo
                                                                                                                                                                                                                                                                                                                                                                                 reproductive system; endocrine system.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human IL-23R coding sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16-DEC-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADS73604;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2521
                                                                                                                                                                                                                                                                                                                                                          sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGAACCAGGAAGGCAGAGGTTGCACTGAGCTTGAGATTGTGCCACTGCACTCCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCCATGGTGGCAGGTGCTTGTAATCCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard; cDNA; 2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2580
```

```
23-SEP-2004.
              WO2004081190-A2.
                                   mat_peptide
                                                  sig_peptide
                                            /product= "IL-23R"
119. .187
                           /*tag= c
188. .2005
                                                                          Location/Qualifiers
```

10-MAR-2003; 2003US-0453672P 09-MAR-2004; 2004WO-US007198

Oft M, WPI; 2004-668951/65. P-PSDB; ADS73605. (SCHE) Mcclanahan SCHERING CORP.

Modulating tumor growth, useful for treating a subject suffering cancer or tumor, comprises contacting a tumor cell with an agonis antagonist of IL-23. fering from agonist or

```
This sequence encodes human interleukin 23 receptor (IL-23R). The method CC of the invention for modulating tumour growth comprises contacting a CC tumour cell with an agonist or antagonist of IL-23. The agonist or a CC antagonist is a binding composition which specifically binds the IL-23 CC antagonist is a binding composition which specifically binds the IL-23 CC antagonist may be used for diagnosing or treating a subject suffering CC from a cancer or tumour. The binding or treating a subject suffering CC binding site of the antibody, an extracellular region of IL-23R, a small CC molecule, an antisense nucleic acid or small interference RNA (siRNA), or CC a detectable label. The binding composition comprises a polyclonal CC antibody, a monoclonal antibody, a humanized antibody or its fragment, a CC fab, Fv, F(ab') 2 fragment, or a peptide mimetic of an antibody. The CC tumour cell is a colon, oversian or breast cancer cell, or melanoma cell. CC in the treatment method, the antagonist of IL-23 inhibits growth of CC cuncer or tumour, cachexia, anorexia or angiogenesis. The cancer or CC tumour is of the gastrointestinal tract, respiratory tract, the binding CC composition comprises a nucleic acid probe or primer that specifically binds or hybridises to human or mouse IL-23pl CDNA sequences, or the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 100.
Matches 2859; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 2859 BP; 929 A; 575 C; 560 G; 791 T; 0 U; 4 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      human IL-23R sequence.
    601
                                                                                                                  541
                                                                                                                                                          481
                                                                                                                                                                                               481
                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                     100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4; SEQ
CATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTACA
                                                                                                                                                                               TGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGCAA
                                                                                                                                                                                                                                        CACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAAGACATTTCTTC
                                                                                                                                                                                                                                                            CACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCTTC
                                                                                                                                                                                                                                                                                                                 TAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTACTG
                                                                                                                                                                                                                                                                                                                                     TAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTACTG
                                                                                                                                                                                                                                                                                                                                                                                                AAGGAAACTTCATTTTTATAAAATGGCATCAAAGAAAGATTTCAAATCACAAGGATTAA
                                                                                                                                                                                                                                                                                                                                                                                                                       TTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGAATTATGTGCTTCAAACAGGTTGAAAGAGGGAAACAGTCTTTTCCTGCTTCCAGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAATTATGTGCTTCAAACAGGTTGAAAGAGGGAAACAGTCTTTTCCTGCTTCCAGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGGTACGGGAATTCCATTGTGTTGGGCAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGGTACGGGAATTCCATTGTGTTTGGGCAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NO 5; 57pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 2857.4; 100.0%; Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 13; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                        660
                                                                                                                    600
                                                                                                                                                            540
                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                               600
                                                                                                                                                                                                 540
                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                    S
                                                                                                                                  ঠ
                                                                                                                                                                               밁
                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                      밁
                                                                                                 밁
                                                                                                   1621
                                                                                                                                                                                 1561
                                                                                                                                                                                                                                                            1501
                                                                                                                                                                                                                                                                                                 1501
                                                                                                                                                                                                                                                                                                                                       1441
                                                                                                                                                                                                                                                                                                                                                                            1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTTGGGTCCAAGCAGCAACGC
                                      TCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTTCAAGTGTGAATTCACTAAG 1740
                                                                                                                      TAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAATAA 1680
                                                                                                                                                                                                   CACTGGATATAAACCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAATAA 1620
                                                                                                                                                                                                                                                                                                                                         CATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACAAG
                                                                                                                                                                                                                                                                                                                                                            CATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                           TAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAAGAAATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAATAA 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCCAT 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAA 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGGGATAGTCAAACAACTTGAAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAACGC
                                                                                                                                                                                                                                                            AGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTCAA
                                                                                                                                                                                                                                                                                AGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTTCCTGATCTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                     TAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATTCC 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTGGGATAGTCAAACAACTTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCTTC
                                                                                                 TAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAATAA
                                                                                                                                                                                 CACTGGATATAAACCCCCAAATTTCCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1080
                                                                                                                                                                                                                                                                                                                                                                                  1500
                                                                                                                                                                                                                                                                                                                                                                                                                       1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1200
                          1740
                                                                                                       1680
                                                                                                                                                                                   1620
                                                                                                                                                                                                                                                                                                                                           1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            780
```

밁 S 밁 **3** B ð 문 ঠ B ફ 밁 Ş 밁 ફ 밁 र् 仔 ર્ક 밁 ঠ

```
2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGG
                                                                                   GGCCATGGTGGCAGGTGCTTGTAATCCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCAC
                                                                                                                                                                     CGAGTCCAGCCTGGCCAATATGCTGAAAACCCCTGTCTCTACTAAAATTTACAAAAATTAGCC
                                                                                                                                                                                                                                                         TGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTT
                                                                                                                                                                                                                                                                                                                AAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCA
                                                                                                                                                                                                                                                                                                                                           AAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                    GATGCAAAACAGCTCTCTATTGTGTACAGAAAGGGTAAATAATGCAAAATACCTGGTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                             GATGCAAAACAGCTCTCTATTGTGTACAGAAAGGGTAAATAATGCAAAATACCTGGTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGTCCCGAAGGTGGAACATGCTTCATGGTCACACATACAGGCACAAAAACAGCATTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCCATGCCTTTTTAATTTTAGCCATTCTTCTGCCTMATTTCTTAAAATTAGAGAATTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTTTCCAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATACCTAGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTTTCTACCAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAAAATGTATTCACATACAAATCTTCACATGGACACATGTTTTCATTTCCCTTGGATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAAAATGTATTCACATACAAATCTTCACATGGACACATGTTTTCATTTCCCTTGGATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCTTGCAATCTGAACTTGGGTTTTTCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCTTGCAATCTGAACTTGGGTTTTTCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAATAGGATTTCACTCTTGGAAAAGTAGAGCTGTGTGGTCAAAATCAATATGAGAAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAATAGGATTTCACTCTTGGAAAAGTAGAGCTGTGTGTGGTCAAAATCAATATGAGAAAACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTTGTCTCCTGTTTTGGGGATCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGACATACAAAACTCAGTAGAGGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGAGTCCAGCCTGGCCAATATGCTGAAACCCCTGTCTCTACTAAAATTACAAAATTAGCC
                                                                                                                                                                                                                                   TGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGTCCCGAAGGTGGAACATGCTTCATGGTCACACATACAGGCACAAAAACAGCATTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTTTCCAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATACCTAGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTTCTACCAATCT
                                                                                                                                                                                                                                                                         2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1800
                                                             2760
                                                                                                                                               2700
                                                                                                                                                                                                                                   2640
                                                                                                                                                                                                                                                                                                                   2580
                                                                                                                                                                                                                                                                                                                                                             2580
                                                                                                                                                                                                                                                                                                                                                                                                       2520
                                                                                                                                                                                                                                                                                                                                                                                                                                                 2520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1860
```

중 음 중

음 성 음

5 뮹 중 유 Ś 밁 8 밁 S 뮍 5 밁

```
RESULT 3
ALBASIONS
ALBASIONS
ACC ALBASIONS
A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Diagnosis; therapeutic; asthma; antiasthmatic; immune distinflammation; respiratory disease; allergy; antiallergic; chronic obstructive pulmonary disease; respiratory-gen.; pulmonary fibrosis; antiinflammatory; pneumonia; infectiorytokine receptor family; gene; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human DNAX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AEA51089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cytokine receptor subunit 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /*tag= b
/product= '
protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag= a
119. .2008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /transl_except= (pos:125...127, aa: Xaa)
/note= "Xaa corresponds to Gln or His"
/transl_except= (pos:563...565, aa: Xaa)
/note= "Xaa corresponds to Gly or Arg"
188...2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /product= "Mature
(DCRS5) protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNAX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cytokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (DCRS5)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNAX cytokine receptor subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (DCRS5)
```

18-NOV-2004; 2004WO-US038886

21-NOV-2003; 2003US-00720026.

SCHE

Σ Kastelein ₽, Moore ₹

2005-418000/42.)B; AEA51090.

Use of an agonist or antagonist of DNAX cytokine receptor subunit (DCRSS) or of pl9 for treating a human subject experiencing a physiological disorder such as allergy or chronic obstructive pult disorder (COPD). pulmonary v

문

S

음 성

B S 밁 5 В

Claim 1; SEQ ID NO 1; 89pp; English.

The present invention relates to a method of treating a human subject experiencing a physiological disorder. The method involves administering an agonist or antagonist of DNAX cytokine receptor subunit 5 (DCRS5, also known as IL-23R) or of pl9, where the disorder comprises asthma or allergy, chronic obstructive pulmonary disorder (COPD) or an interstitial lung disorder. The invention is useful for treating interstitial lung disorder e.g. idiopathic pulmonary fibrosis, eosinophilic granuloma and hypersensitivity pneumonitis. The present sequence is the human DCRS5 DNA.

Sequence 2859 B₽; 929 P 575 ü 560 င့ 791 Ţ, 0

Score 2857.4; 몂

성 유 ð 유 성 유

8 밁 ર્

	Best Match Oy Db Db Db
TCATGGAGGANTIACAAATATAAACTGCTCTGGCCACATTGGGTAGAACCAGGCACAATTGGGTAGAACCAGGCACAATTGGGTAGAACCAGGCACAATTGGGCACAATTGGGCACAATTGGGCACAATTGGGCACAATTGGGCACAATTGGGCACAATTTTTTCAAGAATGATTAAAAATTGCCATTGGCCACATTGGGTAGAACCAGCACAACCAATTAAAAACTGCTTTGGAAAAATTGCCAAGGAATTAAAAACTGCCACCACAATTAAAAAACTGCCAAGGAACCAAATTAAAAACTGCCAAGGAACTTAAAAAACTTCTATTATAAAAAATGGCATCAAAGAATTACAAGGAATTAAAAACTTCTATTATAAAAAATTGCCAAGGAACCAATTACAAGGAATTAAAAACTTTCTAAGAAAACTTTCAAATCACAAGGATTAAAAAACTTTCTAAGAACCACATTGGTTCAATTAACAACTTCATTATAAAAAACTTTCTAGGAACCACATTGGTTCAATTAACAACTTCATTTAAAAAACTTTCTAGGAAAAACTTTCTATGTACTGGAAAAAACTTTCTAGGAAAAAACTTTCTAGGAAAAAACTTTCTATGTACTGGAAAAAACTTTCTTCAAGAAAAACTTTCTAGGAAAAAACTTTCTAGGAAAAAACTTTCTATGTAATAAAAACTTTCTAGGAAAAAACTTTCTATGTAATAAAAACTTTCTAGGAAAAAACTTTCTAGGAAAAAACTTTCTAGGAAAAAACTTTCTAGGAAAAAACTTTCTAGGAAAAAACTTTCTAGGAAAAAACTTTCTAGGAAAAAACTTTCTAGGAAAAAACTTTCTAGGAAAAAACTTTCTAGGAAAAAACTTTCTAGGAAAAAAAA	Best Local Similarity 100.0%; Pred. No. 0; Matches 2859; Conservative 0; Mismatches 0; Indels 0; Gaps 0; 1 GTGGTACGGGAATTCCATTGTGTTTGGGCAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGT 60
8 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2	B & B & B & B
1261 AACTGGGATTANAMGANGATCTTATTGTANATCCAAGTGGGCTTTATGGAGATATTCC 1320 1221 TANTATGGAANACAGCAATGTTGTGAAAATGCAAAGTGGGCTTTATGGAAGATATTCC 1320 1221 TANTATGGAANACAGCAATGTTGTGGAAAATGCAAAGTGGGATTATGGAAATATAA 1380 12321 TANTATGGAANACAGCAATGTTGTGGAAATGCCAAGTGCAATTATGAAAATAAAT	1021 AAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAACACCTGAAACAGTTCCCCA 1081 GGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCCAT

```
RESULT 4
AAD3873
IID AAD3873
XX AAD3873
AC AAD3
XX AAD37
XX AAD3
XX Huma
XX Hu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멎
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                          pancytopaenia; leukopaenia; anaemia; thrombocytopaenia; osteoporosis; neurodegenerative disorder; leukaemia; carcinoma; haematologic disorder; cancer; myelodysplastic syndrome; idiopathic thrombocytopaenic purpura; ITP; sickle cell vasocclusive crisis; myelofibrosis; myeloid metaplasia; osteoclast disorder; periodontitis; acute polyneuropathy; Bell's palsy; anorexia nervosa; chronic fatigue syndrome; Creutzfeld-Jacob disease; demyelinating neuropathy; Guillain-Barre syndrome; Gulf war syndrome; vertebral disc disease; myasthenia gravis; chronic neuronal degeneration; stroke; fatigue; tumour; sarcoma; osteoporosis; obesity; infertility;
                                                                                                                                                                                                                                                                                                                                                                                                      Human; haematopoietin receptor; receptor; HPR1; HPR2; cell proliferation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAD38773 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 haematopoietin receptor 2 (HPR2) cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGAGTCCAGCCTGGCCAATATGCTGAAACCCTGTCTCTACTAAAATTACAAAAATTAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATGCAAAACAGCTCTCTATTGTGTACAGAAAAGGGTAAATAATGCAAAATACCTGGTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATGCAAAACAGCTCTCTATTGTGTACAGAAAGGGTAAATAATGCAAAATACCTGGTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGACGCCTCATGTATTTTTATAGAGTCAACTATTTCCTCTTTATTTTCCCTCATTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGACGCCTCATGTATTTTTTATAGAGTCAACTATTTCCTCTTTTATTTTCCCCTCATTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGTCCCGAAGGTGGAACATGCTTCATGGTCACACATACAGGCACAAAAACAGCATTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGTCCCGAAGGTGGAACATGCTTCATGGTCACACATACAGGCACAAAAACAGCATTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCCATGCCTTTTTAATTTTAGCCATTCTTCTGCCCIMATTTCTTAAAATTTAGAGAATTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCCATGCCTTTTAATTTTAGCCATTCTTCTGCCTMATTTCTTAAAATTAGAGAATTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTTTCCAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTTTCCAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGAGTCCAGCCTGGCCAATATGCTGAAAACCCCTGTCTCTACTAAAAATTACAAAAATTAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATACCTAGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTTCTACCAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2280
```

```
06-OCT-2000; 2000US-0238706P
13-OCT-2000; 2000US-0240476P
20-FEB-2001; 2001US-0270282P
                                                                                                                                                                                                                                                                                                                                                                                 CDS
                                    Cosman DJ,
                                                                                                                                       05-OCT-2001; 2001WO-US031634
                                                                                                                                                                                                                               variation
                                                                                                                                                                                                                                                      variation
                                                                                                                                                                                                                                                                                        mat_peptide
                                                                                                                                                                                                                                                                                                                sig_peptide
                                                                                                                                                                                          WO200229060-A2
                                                             (IMMV ) IMMUNEX CORP.
           2002-330172/36.
AAE24033
                                    Mosley BA,
                                                                                                                                                                                                                                                  /*tag= c
/product= "Hum
replace(1035,
                                                                                                                                                                                                                             /*tag= d
replace(2172,
                                                                                                                                                                                                                                                                                          /*tag= b
176. .1993
                                                                                                                                                                                                                                                                                                                  20 in claim 9
137. .175
                                                                                                                                                                                                                                                                                                                         /product= "Human HPR2 protein"
/note= "This region is specifically claimed as SEQ ID NO:
20 in claim 9 of the specification"
                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                      /*tag=
                                                                                                                                                                                                                   Φ
                                                                                                                                                                                                                                                                                                                                                                      þ
                                      Bird
                                                                                                                                                                                                                                                     "Human
.035, C)
                                      Ţ,
                                                                                                                                                                                                                               છ
                                                                                                                                                                                                                                                                   mature
                                      Dubose
                                      RF,
                                                                                                                                                                                                                                                                  protein'
                                    Wiley
```

Human and murine hematopoietin receptor useful for treating cell proliferation, hormone related conditions. polypeptides HPR1 and HPR2, metabolic, and reproductive

Claim 9; Page 117-119; 136pp; English

The present invention relates to human and murine haematopoietin receptor conjypeptides HPR1 and HPR2. Sequences of the invention are useful for treating cell proliferation conditions e.g., pancytopaenia, leukopaenia, conditions ellas conditions and tumour creating from a lack of bone-forming cells. They are also useful for treating warious haematologic and conditions and temporosis resulting from an excess of bone-resorbing conditions and cells. HPR sequences are also useful for treating medical conditions and cells. HPR sequences e.g., Epstein-Barr virus-positive nasopharyngeal carcinoma, myelogenous leukaemia, colon, stomach, prostate, renal cell, cervical and ovarian cancers, lung cancer (SCIC and NSCIC), including cancer.associated cachexia, fatigue, solid tumours (e.g., osteosarcoma, sarcoma), carcinoma (e.g., adenocarcinoma (for example, breast cancer), csquamous cell carcinoma), haematologic disorders, anaemias (e.g., anaemia cotopaenia purpura (ITP), sickle cell vasocclusive crisis, myelofibrosis/ costeoporosis including post memopausal osteoporosis, periodontitis costeoporosis including post memopausal osteoporosis periodontitis creplacement, neurodegenerative conditions (e.g., acute polymeuropathy, compatication memory devolutions, vertebral disease, demyelinating neuropathy, compaticant memory actions cellos disease, demyelinating neuropathy, conditiont memory devolutions, vertebral degeneration, stroke including cerebral ischaemic diseases. HPR1 and HPR2 polypeptides are also useful conditiont memory devolutions diseases. deficient mammary development and infertility. The present sequence is

Homo sapiens

ischaemic disease; gene; ss

B 8	용 성	유 성	ß &	용 성	B 8	용 성	유 성	B 8	유 성	_ይ	용 성	F &	å <i>&</i>	유 왕	B 8	B 8	SQ Se Query Best Match
88 CGTATTTCAAGTGAGATGTCAAGAAACAGGCAAAAGGTACTGGCAGCCTTGGAGTTCACC 1 	928 TGACACCAATTTTACATATGTGCAACAGTCAGAATTCTACTTGGAGCCAAACATTAAGTA 987 	868 GGTTTCCTGTGAAATGAGATACAAGGCTACAACAACCAAACTTGGAATGTTAAAGAATT 927 	808 TATAAATGCTACAGTGCCCAAGACCATAATTTATTGGGATAGTCAAACAACTAATTGAAAA 867 	748 GCAAATTCACCTGGATGATATAGTGATACCTTCTGCAGGCGTCATTTCCAGGGCTGAGAC 807 	688 GAAGTACTTGGTTTTGGGTCCAAGCAGCAACGCACTAGGCATGGAAGAGTCAAAACAACT 747	628 GCAACAGTATCTCACCTCAAGCTATATTAACATCTCCACTGATTCATTACAAGGTGGCAA 687 [568 GCTCACCTACATAGACACAAAATACGTGGTACATGTGAAGAGTTTAGAGACAGAAGAAGA 627 	508 AGTAACCTGTGTCATTTATGAATATTCAGGCAACATGACTTGCACCTGGAATGCTRGGAA 567 	448 AGAGACACTGATATGTGGAAAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGA 507 	388 ANACTTICTOGAACCACATGCTICTATGTACTGCACTGCTGAATGTCCCAAACATTTTCA 447	328 CATCAAAGAAAGATTCAAATCACAAGGATTAATAAAACAACAGCTCGGCTTTGGTATAA 387 	268 ATATTGCCAAGCAGCAATTAAGAACTGCCAACCAAGGAAACTTCATTTTTATAAAAATGG 327	208 CTCTGGCCACATCTGGGTAGAACCAGCCACAATTTTTAAGATGGGTATGAATATCTCTAT 267 	148 AGTAATAGCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATATAAACTG 207 	88 AGAGGGAAACAGTCTTTTCCTGCTTCCAGACATGAATCAKGTCACTATTCAATGGGATGC 147 	28 CAGCCAACAAGGTGGCAGCCTGGCTCTGAAGTGGAATTATGTGCTTCAAACAGGTTGAA 87 	Q Sequence 2830 BP; 922 A; 574 C; 551 G; 783 T; 0 U; 0 Other; Query Match 98.3%; Score 2810.2; DB 6; Length 2830; Best Local Similarity 99.8%; Pred. No. 0; Matches 2809; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
₽ <i>Q</i>	B &) B 5	S & &) B &	P &) B &	₽ \$	S B &	} B &	S B &	? B £	S B 4	S B 8	S B 1	S B 7	φ b	& B &
2068 CTGCAATAGAATTCGAATTCTGCCTCTTTTTGAAAAAATGTATTCACATACAAATCTTC 2127 	GAGCTGTGTGTCAAAATCAATATGAGAAAGCTGCCTTGCAATCTGAACTTTGGGTTTTTCC		76	28 AACCACCAIGCIIIIGAAAAIGAIICACCCAGIGAAACIAIICCAGAACAGACCCIGCI 16 AACCACCAIGCTTTTGGAAAATGATTCACCCAGTGAAACTATTCCAGAACAGACCCTGCT	CLICALELIAMA LAMGEMANISCHOSILCICIGACHA CANANCICHOLAGAGAGAGAGA CHILLIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	, o a	ACCACCAGITGATICCITAGACICAGGAAATAATCCCAGGITACAAAAGCATCTAAATTT		CONTROLACION DE LA CACAMATRIA I COLONA EL CACAMATRICA COLONA EL CACAMATRICA COLONA EL CACAMATRICA CACA	CARGANGSAGATICACACHT (C. 1) CARGANGSAGACTACCCCACACACT (C. 1) CARGANGGAGAAAACTCCCCTATTCGA 56 CAAGAAGGAGAATACAGGACCCCTGGAGACAAGAGACTACCCGCAAAACTCCGCTATTCGA 56 CAAGAAGGAGAATACAGGACCCCTGGAGACAAGAGACTACCCGCAAAACTCGCTATTCGA	SO TORNES DEGREES ATTACAGES CONCURS AND						1048 GTTTTTCATAAAACACCTGAAACAGTTCCCCAGGTCACATGAAAGCATTCCAACATGA 1107

```
RRESULT 5
AAF88
AXX AAF88
XX AAF88
XX AAF8
XX Huma
DE Huma
XX 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   유 &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                           Human; haemopoietin receptor protein; NR12; immunosuppressive; antiallergic; haemopoietin factor; autoimmune disease; tissue metal allergy; pollen allergy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                    11-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAF87820 standard; cDNA; 2123
                             WO200123556-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2176
                                                                                                                                                                                                                                sapiens
                                                                                                                                                                                                                                                                                                                                                                             haemopoietin receptor protein NR12.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGCTGAGATTGTGCCACTGCACTCCAGCCTGGGCAACAAGAGCAAAACTCTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCAGGAAGGCAGAGGTTGCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCCTGTCTCTACTAAAATTACAAAAATTAGCCGGCCATGGTGGCAGGTGCTTGTAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGAGGTRGGTGGATCACCTGAGGTCAGGAGTTCGAGTCCAGCCTGGCCAATATGCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAATAGAATCATTAGGCCAGGCGTGGTGGCTCATGCTTGTAATCCCAGCACTTTGGTAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAACTATTTCCTCTTTATTTTCCCTCATTGAAAGATGCAAAACAGCTCTCTATTGTGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAACTATTTCCTCTTTATTTTCCCTCATTGAAAGATGCAAAACAGCTCTCTATTGTGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTCACACATACAGGCACAAAAACAGCATTATGTGGACGCCTCATGTATTTTTATAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTCACACATACAGGCACAAAAACAGCATTATGTGGACGCCTCATGTATTTTTTATAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTCTGCCTMATTTCTTAAAATTAGAGAATTAAGGTCCCGAAGGTGGAACATGCTTCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCCTACCATCACCATGTAAGAATTCCCGGGAGCTCCATGCCTTTTTAATTTTAGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGCTACTTGGGAGGCTGAGGCAGGAGATCACTTGAACCAGGAAGGCAGAGGTTGCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGAGGTAGGTGGATCACCTGAGGTCAGGAGTTCGAGTCCAGCCTGGCCAATATGCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ANATAGNATCATTAGGCCAGGCGTGGTGGCTCATGCTTGTAATCCCAGCACTTTGGTAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCCTACCATCACCATGTAAGAATTCCCGGGAGCTCCATGCCTTTTTAATTTTAGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                    Location/Qualifiers
                                                                               note=
                                                                                               /*tag= a
/product= "NR12.3"
                                                                            "haemopoietin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВP
                                                                            receptor
                                                                                                                                                                                                                                                                                                                                                                             encoding cDNA SEQ
                                                                            protein"
                                                                                                                                                                                                                                                                                                                                                                                  ID NO:5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2187
S
                                            밁
                                                                                       Ş
                                                                                                                                                    밁
                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뭥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    $\times CCCCCCX \text{PX PP PP X PR X PR X PR X PR X PR X PP PP X PR X 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Simi
Matches 2085;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence encodes a human haemopoietin receptor protein NR12 designated NR12.3. NR12 has immunosuppressive and antiallergic activities. NR12 can be used for searching for haemopoietin factors with the potential for controlling autoimmune disease, tissue rejection and allergies against e.g. metals and pollen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New hemopoietin receptor protein NR12 useful for screening for new binding factors for potential treatment of autoimmune disease, tissue rejection and allergies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2123 BP; 731 A; 419 C; 395 G; 578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Fig 6; 140pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Maeda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-SEP-1999; 99JP-00273358.
03-AUG-2000; 2000JP-00240397.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-SEP-2000; 2000WO-JP006654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (CHUG-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001-266154/27.
DB; AAB74965.
                                                                                                                                                                                                                                                                                                                                                     367
                                                  547
                                                                                                                                                                                                      805
                                                                                                                                                                                                                                                        427
                                                                                                                                                                                                                                                                                                     448
                                                                                                                                                                                                                                                                                                                                                                                                          388
                                                                                                                                                                                                                                                                                                                                                                                                                                                         307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           247
                                                                                                                                                      487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHUGAI RES INST MOLECULAR MEDICINE
                                                                                                                                                                                      AGTAACCTGTGTCATTTATGAATATTCAGGCAACATGACTTGCACCTGGAATGCTRGGAA
                                                                                                                                                                                                                                                                                   AGAGACACTGATATGTGGAAAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATCAAAGAATTTCAAATCACAAGGATTAATAAAACAACAGCTCGGCTTTTGGTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATCAAAGAAAGATTTCAAATCACAAGGATTAATAAAACAACAGCTCGGCTTTGGTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATATTGCCAAGCAGCAATTAAGAACTGCCAACGAAACTTCATTTTATAAAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCTGGCCACATCTGGGTAGAACCAGCCACAATTTTTAAGATGGGTATGAATATCTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTAATAGCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATATAAACTG
     GCAACAGTATCTCACCTCAAGCTATATTAACATCTCCACTGATTCATTACAAGGTGGCAA
                                                                                                    GCTCACCTACATAGACACAAAATACGTGGTACATGTGAAGAGTTTAGAGACAGAAAAAAA
                                                                                                                                                                                                                                                                                                                                                          AMACTITICIGGAACCACAIGCTICIAIGTACIGCACIGCIGAAIGICCCAAACAITITICA
                                                                                                                                                                                                                                                                                                                                                                                       AGAGGGAAACAGTCTTTTCCTGCTTCCAGACATGAATCAGGTCACTATTCAATGGGATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGAGGGAAACAGTCTTTTCCTGCTTCCAGACATGAATCAKGTCACTATTCAATGGGATGC
                                                                                                                                                         AGTAACCTGTGTCATTTATGAATATTCAGGCAACATGACTTGCACCTGGAATGCTGGGAG
                                                                                                                                                                                                                                                           AGAGACACTGATATGTGGAAAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  72.8%;
99.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 2081.4;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 2123;
```

0;

Gaps

0

```
1387
                                                                                                                                                                                                                                                   1147
                                                                             1507
                                                                                            1528
                                                                                                                                                                 1327
                                                                                                                                                                              1348
                                                                                                                                                                                            1267
                                                                                                                                                                                                          1288
                                                                                                                                                                                                                         1207
                                                                                                                                                                                                                                       1228
                                                                                                                                                                                                                                                                                1087
                                                                                                                                                                                                                                                                                                            1027
                                                                                                                                                                                                                                                                                                                         1048
                                                                                                                                                                                                                                                                                                                                       967
                                                                                                                                                                                                                                                                                                                                                     988
                                                                                                                                                                                                                                                                                                                                                                   907
                                                                                                                                                                                                                                                                                                                                                                                928
                                                                                                                                                                                                                                                                                                                                                                                               847
                                                                                                                                                                                                                                                                                                                                                                                                             868
                                                                                                                                                                                                                                                                                                                                                                                                                           787
                                                                                                                                                                                                                                                                                                                                                                                                                                         808
                                                                                                                                                                                                                                                                                                                                                                                                                                                       727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCTTTTTCTGTTTCAAGTGTGAATTCACTAAGCAACACAATATTTCTTGGAGAATTAAG
                      ACCACCAGTTGATTCCTTAGACTCAGGAAATAATCCCCAGGTTACAAAAGCATCCTAATTT
                                                 CAAGAAGGAGAATACAGGACCCCTGGAGACAAGAGACTACCCGCAAAACTCGCTATTCGA
                                                                                                                                             TGATCCCATGATTACAGAGATAAAAGAAATCTTCATCCCAGAACACAAGCCTACAGACTA
                                                                                                                                                                         AATGCTACAGGAAAATAGTGAACTTATGAATAATAATTCCAGTGAGCAGGTCCTATATGT
                                                                                                                                                                                            TICTITGATIGGGATATITAACAGATCATICCGAACTGGGATTAAAAGAAGGATCTTATI
                                                                                                                                                                                                                                                    TATAAATGCTACAGTGCCCAAGACCATAATTTATTGGGATAGTCAAACAACAATTGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                    TATAAATGCTACAGTGCCCAAGACCATAATTTATTGGGATAGTCAAACAACAACTGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGATCCCATGATTACAGAGATAAAAGAAATCTTCATCCCAGAACACAAGCCTACAGACTA
                                                                                                                                                                 AATGCTACAGGAAAATAGTGAACTTATGAATAATAATTCCAGTGAGCAGGTCCTATATGT
                                                  1626
                                                               1647
                                                                             1566
                                                                                          1587
                                                                                                          1506
                                                                                                                       1527
                                                                                                                                     1446
                                                                                                                                                   1467
                                                                                                                                                                  1386
                                                                                                                                                                               1407
                                                                                                                                                                                             1326
                                                                                                                                                                                                           1347
                                                                                                                                                                                                                         1266
                                                                                                                                                                                                                                      1287
                                                                                                                                                                                                                                                     1206
                                                                                                                                                                                                                                                                  1227
                                                                                                                                                                                                                                                                                1146
                                                                                                                                                                                                                                                                                              1167
                                                                                                                                                                                                                                                                                                            1086
                                                                                                                                                                                                                                                                                                                         1107
                                                                                                                                                                                                                                                                                                                                        1026
                                                                                                                                                                                                                                                                                                                                                     1047
         1767
                       1686
                                                                                                                                                                                                                                                                                                                                                                    966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              666
                                                                                                                                                                                                                                                                                                                                                                                  987
                                                                                                                                                                                                                                                                                                                                                                                                906
                                                                                                                                                                                                                                                                                                                                                                                                             927
                                                                                                                                                                                                                                                                                                                                                                                                                           846
                                                                                                                                                                                                                                                                                                                                                                                                                                          867
                                                                                                                                                                                                                                                                                                                                                                                                                                                       786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   726
```

8 8 8 8 8 8 8

8 8 8 8

ঠ 🖁 ঠ

음 중 음

S

밁 र् 밁 중 유

The present designated 1

t sequence encodes a human haemopoietin NR12.5. NR12 has immunosuppressive and

receptor protein antiallergic

NR12

중 음 중 음

ફ

유 당

& & &

```
ARBSULT 6
AAP87 32
ID AAP87
XX AAP87
XX AAP87
XX AAP87
XX AAP87
XX Hume
XX Hume
XX AAP87
XX A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                           New hemopoietin receptor protein NR12 useful for screening for binding factors for potential treatment of autoimmune disease, rejection and allergies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ното
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; haemopoietin receptor protein; NR12; immunosuppressive; antiallergic; haemopoietin factor; autoimmune disease; tissue rejection; metal allergy; pollen allergy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human haemopoietin receptor protein NR12.5 encoding
                                                               Claim 1; Fig 13; 140pp; Japanese.
                                                                                                                                                                                                      WPI; 2001-266154/27.
P-PSDB; AAB74967.
                                                                                                                                                                                                                                                                        Maeda M,
                                                                                                                                                                                                                                                                                                                                                              27-SEP-1999; 99JP-00273358
03-AUG-2000; 2000JP-00240397
                                                                                                                                                                                                                                                                                                                                                                                                                               27-SEP-2000; 2000WO-JP006654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAF87822;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAF87822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sapiens.
                                                                                                                                                                                                                                                                                                                    CHUGAI RES INST MOLECULAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CIGCAATAGAAATTGAATTCTGCCTCTTTTTGAAAAAAAATGTATTCACATCCCAA 2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCTGATGAATTTGTCTCCTGTTTGGGGATCGTGAATGAGGAGTTGCCATCTATTAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTCATATTAAATCAAGGAGAATGCAGTTCTCCTGACATACAAAACTCAGTAGAAGGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGCAATAGAAATTGAATTCTGCCTCTTTTTGAAAAAAATGTATTCACATACAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACCACCATGCTTTTGGAAAATGATTCACCCAGTGAAACTATTCCAGAACAGACCCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AACCACCATGCTTTTGGAAAATGATTCACCCAGTGAAACTATTCCAGAACAGACCCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGCTTTTTCTGTTTCAAGTGTGAATTCACTAAGCAACACAATATTTCTTGGAGAATTAAG
                                                                                                                                                                                                                                                                     Yaguchi N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag= a
/product= "NR12.5"
/note= "haemopoiet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "haemopoietin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     receptor protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NO: 9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1806
```

```
ঠ
                    5
                               8 8 8 8 8 8 8 8 8 8
                                                                                                                                                      5
                                                                                                                                                                     음 성 음
                                                                                                                                                                                                       & B 8
                                                                                                                                                                                                                                         닭
                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                     몽
                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                      ភិព្ពស្តី
ភូពិន្ត្
                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 99.8
Matches 1906; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                              activities. NR12 can be used for searching for haemopoietin factors with the potential for controlling autoimmune disease, tissue rejection and allergies against e.g. metals and pollen
                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1910 BP; 654 A; 379 C; 352 G; 525 T; 0 U; 0 Other;
          1019
                                   959
                                               781
                                                          899
                                                                                               661
                                                                                                                      601
                                                                                                                                              541
                                                                                                                                                          659
                                                                                                                                                                      481
                                                                                                                                                                                  599
                                                                                                                                                                                              421
                                                                                                                                                                                                          539
                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                  479
                                                                                                                                                                                                                                             301
                                                                       721
                                                                                  839
                                                                                                          779
                                                                                                                                  719
                                                                                                                                                                                                                                                         419
                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                 359
                                                                                                                                                                                                                                                                                                         299
                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                  239
                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                      AACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                    ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                     TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                           AAAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAAACAGTTCCC
       AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                            TATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                     ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                    66.7%;
                                                                                                                                                                                                                                                                                                                                                                                            %; Score 1906; D
%; Pred. No. 0;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                          띪
                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                             2;
                                                                                                                                                                                                                                                                                                                                                                                                         Length 1910;
                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                   1018
           1078
                       900
                                               840
                                                          958
                                                                                   898
                                                                                                                                                                                                          865
960
                                                                                              720
                                                                                                          838
                                                                                                                      660
                                                                                                                                              600
                                                                                                                                                          718
                                                                                                                                                                      540
                                                                                                                                                                                  658
                                                                                                                                                                                              480
                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                 538
                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                         478
                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                  418
                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                          358
                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                  298
                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                             0
RESULT 7
ADV43392
ID ADV4
XX
AC ADV4
XX
DT 10-M
                                                     유
                                                                           음 성 음
                                                                                                             S
                                                                                                                            밁
                                                                                                                                    5
                                                                                                                                                    문
                                                                                                                                                              8
                                                                                                                                                                            유
                                                                                                                                                                                                   밁
                                                                                                                                                                                                             8
                                                                                                                                                                                                                        멍
                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                    음 성
                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                           닭
                                                                                                                                                                                                                                                                                                                                                                                                                                   S
            ADV43392;
10-MAR-2005
                       ADV43392
                                                                                                                                    1799
                                                                                                                                                                                                                           1441
                                                     1861
                                                                                                                 1859
                                                                                                                             1681
                                                                                                                                                    1621
                                                                                                                                                                            1561
                                                                                                                                                                                        1679
                                                                                                                                                                                                    1501
                                                                                                                                                                                                                1619
                                                                                                                                                                                                                                        1559
                                                                                                                                                                                                                                                               1499
                                                                                                                                                                                                                                                                           1321
                                                                                                                                                                                                                                                                                       1439
                                                                                                                                                                                                                                                                                                    1261
                                                                                                                                                                                                                                                                                                               1379
                                                                                                                                                                                                                                                                                                                           1201
                                                                                                                                                                                                                                                                                                                                                    1141
                                                                                                                                                                                                                                                                                                                                                               1259
                                                                                                                                                                                                                                                                                                                                                                            1081
                                                                                                                                                                                                                                                                                                                                                                                                    1021
                                                                                                                                                                                                                                                                                                                                                                                                               1139
                                                                                                                                                                                                                                                                                                                                                                                                                           AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC
                                                                                                                           CCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCC
                                                                                                                                                    AGCAACACATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                           AATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT
                                                                                                                                                                                                                           AACACTGGATATAAACCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAAT
                                                                                                                                                                                                                                                  AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                                                                                           CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                                                                                                                                                                                                                   CGAACTGGGATTAAAAGAAGGATCTTAATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                             GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCAC
                                                                                   GTGAATGAGGAGTTGCCATCTAATTACTTACTTTTCCACAAAATATTTTTGGAAAGCCAC
                                                                                                                                                                                                                                                                           ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
(first
                       CDNA; 1890
entry)
                       дB
                                                                                                                                                                             1620
                                                                                                                                                                                        1738
                                                                                                                                                                                                                1678
                                                                                                                                                                                                                                                                                                                                       1378
                                                                                         1978
                                                                                                    1800
                                                                                                                1918
                                                                                                                             1740
                                                                                                                                        1858
                                                                                                                                                    1680
                                                                                                                                                                 1798
                                                                                                                                                                                                    1560
                                                                                                                                                                                                                                        1618
                                                                                                                                                                                                                                                    1440
                                                                                                                                                                                                                                                                1558
                                                                                                                                                                                                                                                                            1380
                                                                                                                                                                                                                                                                                                    1320
                                                                                                                                                                                                                                                                                                                            1260
                                                                                                                                                                                                                                                                                                                                                    1200
                                                                                                                                                                                                                                                                                                                                                                            1140
                                                                                                                                                                                                                                                                                                                                                                                        1258
                                                                                                                                                                                                                                                                                                                                                                1318
```

```
Query Match
Best Local Similarity
Matches 1887; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a new microarray which comprises probes for genes involved in psychoneuroendocrinimmune (PNI) activity. The microarray is useful in diagnosing a condition associated with PNI activity, such as CFS, type-2 diabetes, allergic condition, inflammation, cancer and infection. The present sequence represents a psychoneuroendocrinimmune gene expressed sequence tag. Note the specificatio mentions SEQ ID NO of up to 3314 but only sequences up to SEQ ID NO 1829 are provided.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       microarray; psychoneuroendocrinimmune; chronic fatigue; non-insulin dependent diabetes; allergy; immune disorder; cancer; neoplasm; infection; expressed sequence tag; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1890 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New microarray comprising psychoneuroendocrinimmune condition associated with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-JUN-2004; 2004WO-US017686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-JUN-2003; 2003US-0475915P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-DEC-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2004108899-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (USSH ) US
                                              479
                                                                                                         419
                                                                                                                                        241
                                                                                                                                                                                                   181
                                                                                                                                                                                                                                299
                                                                           301
                                                                                                                                                                    359
                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    psychoneuroendocrinimmune expressed sequence tag
                                                                                                                                                                                                                                                                                                                                                                                                                     ATGAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG
              TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                        AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                     ATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                                                                                                                                                   ATTTTTAAGATGGGTATGAATATCTCTATATATTTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                                                                                                                                                                                         TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                                                                                                             TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                                                                                                                                                        ATGAATCAGGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG
                                                                            TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ۶
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEPT HEALTH & HUMAN SERVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NO 1020; 254pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             647 A; 377 C; 347 G; 519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                66.1%;
99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           probes for genes involved in (PNI) activity, useful in diagnosing a PNI activity, e.g., inflammatory or in
                                                                                                                                                                                                                                                                                                                                                                                                                                                2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 1887.6;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             T; 0 U; 0 Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1890;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               or infectious
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ĕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1020
                                                                                                           478
                                                                                                                                         300
                                                                                                                                                                                                     240
                                                                                                                                                                                                                                 358
                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                        238
                                                                                                                                                                                                                                                                                                                                                                                        6
                420
                                                                            360
                         皮
S
                                                   र्
                                                                                         밁
                                                                                                                    5
                                                                                                                                                    밁
                                                                                                                                                                            ঠ
                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                    1439
                                                                                                                                                                                                                 1261
                                                                                                                                                                                                                                                1379
                                                                                                                                                                                                                                                                              1201
                                                                                                                                                                                                                                                                                                                                         1141
                                                                                                                                                                                                                                                                                                                                                                                                      1081
                                                                                                                                                                                                                                                                                                                                                                                                                                   1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                 AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAAAATC
                                                                                                                                                                                                                                                                              CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                                                                                                                                                                   CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                                                                                                                                                                                                           CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                                                                                                                                                                                                                                                                                                                                   ATCGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAAACCAAACTTGGAATGTTAAAGAATTTTGACACCAATTTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TATTGGGATAGTCAAACAACAATTGAAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCTCCACTGATTACATTACAAGGTGGCAAGAAGTACTTGGTTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATGTGAAGAGTTTAGAGACAGAAGAAGAGCCAACAGTATCTCACCTCAAGCTATATTAAC
 AATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT
                                              AACACTGGATATAAACCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAAT
                                                                                                           TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACA
                                                                                                                                                                                                                                                                                                                                                                        CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                                                                                                                                                                                                                                                                                                                      ATCGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGGTCACATCAAAAGCATTCCAACATGACACGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAAAACAGTTCCC
                                                                                           AGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTC
                                                                                                                                                        TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCCTGGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     840
                                                                                                                                                                                                                                                                                                              1378
                                                                                                                                                                                                                                                                                 1260
                                                                                                                                                                                                                                                                                                                                                                           1318
                                                                                                                                                                                                                                                                                                                                                                                                                                     1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1078
   1678
                                                                1618
                                                                                              1440
                                                                                                                           1558
                                                                                                                                                                                        1498
                                                                                                                                                                                                                                                 1438
                                                                                                                                                                                                                                                                                                                                             1200
                                                                                                                                                                                                                                                                                                                                                                                                          1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            658
```

중 유

중 유

문

유용

S

δ

음 성

밁

```
RESULT 8
AAD38774
AAD387774
AAD387774
AC AAD3
XX AAD3
XX AAD3
XX Humm
XX OSEC
XX Hom
XX OSEC
X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; haematopoietin receptor; receptor; HPR1; HPR2; cell proliferation; pancytopaenia; leukopaenia; anaemia; thrombocytopaenia; osteoporosis; neurodegenerative disorder; leukaemia; carcinoma; haematologic disorder; cancer; myelodysplastic syndrome; idiopathic thrombocytopaenic purpura; ITP; sickle cell vasocclusive crisis; myelofibrosis; myeloid metaplasia; osteoclast disorder; periodontitis; acute polyneuropathy; Bell's palsy; anorexia nervosa; chronic fatigue syndrome; Creutzfeld-Jacob disease; demyelinating neuropathy; Guillain-Barre syndrome; Gulf war syndrome; vertebral disc disease; myasthenia gravis; chronic neuronal degeneration; stroke; fatigue; tumour; sarccma; osteoporosis; obesity; infertility; ischaemic disease; gene; ds.
WPI; 2002-330172/36.
P-PSDB; AAE24034.
                                                                                                                                                                                                        06-OCT-2000; 2000US-0238706P
13-OCT-2000; 2000US-0240476P
20-FEB-2001; 2001US-0270282P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human haematopoietin receptor 2 (HPR2) ex8-ex9 DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAD38774 standard; DNA; 1698 BP.
                                                                                                                                                                                                                                                                                                                          05-OCT-2001; 2001WO-US031634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200229060-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                         5
                                                                                                                                                   IMMUNEX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTTGGAAAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTTGTCTCCTGTTTTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGTGTGAATTCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTTCAAGTGTGAATTCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCAATAGGATTTCACTCTTGGAAAAGTAG 2008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTTGGAAAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                         Mosley BA,
                                                                                                                                                   CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
1. .1698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag= a
/product= "Human HPR2
                                                                                            Bird
                                                                                            Į,
                                                                                            Dubose
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ex8-ex9
                                                                                            RF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1858
```

Human and murine hematopoietin receptor useful for treating cell proliferation, hormone related conditions. polypeptides HPR1 and HPR2, metabolic, and reproductive

9; Page 123-124; 136pp; English

The present invention relates to human and murine haematopoietin receptor CC polypeptides HPR1 and HPR2. Sequences of the invention are useful for treating cell proliferation conditions e.g., pancycopaenia, leukopaenia, conditions e.g., pancycopaenia, leukopaenia, conditions e.g., pancycopaenia, leukopaenia, conditions e.g., pancycopaenia, leukopaenia, conditions and osteoporosis conditions and osteoporosis conditions such as leukaemia and tumour conditions and collaboration conditions such as leukaemia and tumour collaborations, they are useful for treating medical conditions and concologic disorders e.g., Epstein-Barr virus-positive namopharyngeal carcinoma, myslogenous leukaemia, colon, stomach, prostate, renal cell, cervical and ovarian cancers, lung cancer (SCLC and NSCLC), including cancer-associated cachexia, fatigue, solid tumours (e.g., osteosarcoma, carcinoma), cadenocarcinoma (for example, breast cancer), squamous cell carcinoma), haematologic disorders, anaemia (e.g., adenocarcinoma (for example, breast cancer), confirming confi HPR2 ex8-ex9 DNA

Sequence 1698 BP; 597 A; 335 C; 310 G; 456 T; 0 U; 0 Other;

52.3%;

띪

6

Length 1698,

밁 ঠ á 밁 र् S 밁 맑 Ś 문 S 닭 Query Match Best Local Similarity Matches 1695; Conserv 119 181 361 301 419 241 359 299 121 239 61 _ ATTTTTAAGATGGGTATGAATATCTCTATATATTTGCCAAGCAGCAATTAAGAACTGCCAA TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA ATGAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA ATGAATCAGGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAAGACATTTCT AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC ATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA Conservative 2; Score 1493.6; Pred. No. 0; 2; Mismatches 1; Indels 192; Gaps 478 420 360 300 240 180 120 238 60

문

```
1559
                                                                                                                                                                                   1069
                                                                                                                                                                                                               1379
                                                                                                                                                                                                                                             1009
                                                                                                                                                                                                                                                                            1319
                                                                                                                                                                                                                                                                                                                                         1259
                                                                                                                                                                                                                                                                                                                                                                                                       1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1019
                                                                                                                                                                                                                                                                                                           955
                                                                                                                                                                                                                                                                                                                                                                        955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                AACACTGGATATAAACCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAAT
                                                      TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACA
                                                                                                                                              TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGAAGAATACAGGACCCCTGGAGACA
                                                                                                                                                                                   AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGAATAAAAGAAATC
                                                                                                                                                                                                                                             CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                                                                                                                            CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                                                                                                                                                                           ATCGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAAACA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAMACCAMACTTGGAATGTTAMAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCACTAGGCATGGAAGAGTCAAAAACAACTGCAAATTCACCTGGATGATATAGTGATATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                                                                                                                                        TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
<u>AACACTGGATATAAACCCCAAATTTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAAT</u>
                                                                                                                      1188
                                                                                                                                                   1498
                                                                                                                                                                                                                1438
                                                                                                                                                                                                                                                                                                                                         1318
                                                                                                                                                                                                                                                                                                                                                                                                       1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1018
                           1618
                                                        1248
                                                                                       1558
                                                                                                                                                                                   1128
                                                                                                                                                                                                                                               1068
                                                                                                                                                                                                                                                                            1378
                                                                                                                                                                                                                                                                                                            1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              598
                                                                                                                                                                                                                                                                                                                                                                        954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            660
1308
                                                                                                                                                                                                                                                                                                                                                                                                                                      954
```

8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

```
S
                                          음 성 음
                                                                                                        8
                                                                                                                                    문
                                                                                                                                                      ક
                                                                                                                                                                            밁
                                                                                                                                                                                                    S
                                                                                                                                                                                                                                음 성
                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                               र्
문
                                                                                                                                       1489
                                                                                                                                                                                                                                1369
1669
                      1979
                                            1609
                                                                   1919
                                                                                         1549
                                                                                                                1859
                                                                                                                                                                                   1429
                                                                                                                                                                                                          1739
                                                                                                                                                                                                                                                       1679
                                                                                                                                                                                                                                                                             1309
          TTCAATAGGATTTCACTCTTGGAAAAGTAG
                                                        GTGAATGAGGAGTTGCCATCTAATAATACTTATTTTCCACAAAATATTTTTGGAAAGCCAC
                                                                                                      AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTTGGGGATC
                                                                                                                                                    CCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCC
                                                                                                                                                                                                                                                AATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTTCAAGTGTGTAATTCACTA
                                                                                                                                                                                                                                                                             TTCAATAGGATTTCACTCTTGGAAAAGTAG
                                            GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAAGCCAC
                                                                                                                                       CCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTTGGAAAATGATTCACCC
                                                                                                                                                                                    AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                                  AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                                                                 AATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTTCAAGTGTGAATTCACTA
                                                                                          AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTTGGGGATC
                      2008
                                                                                                                                                                                    1488
                                                                                                                                                                                                           1798
                                               1668
                                                                    1978
                                                                                           1608
                                                                                                                 1918
                                                                                                                                         1548
                                                                                                                                                               1858
                                                                                                                                                                                                                                                                                                      1678
                                                                                                                                                                                                                                    1428
```

AAK98258 standard; DNA; 1887 ВP

28-MAY-2002 (first entry)

DNA.

RRESULT 9
AAK98258
ID AAK98258
AX AAA98258
AC AAA69
AC AAA69
AC Huma
A Human; DNAX cytokine receptor subunit 5, DCRS5, II30 receptor; immune response; p40/II-B30 ligand; cell physiology modulation; cell development modulation; TH-mediated disease; multiple sclerosis; rheumatoid arthritis; osteoarthritis; inflammatory bowel disease; that the profiles; seponse; profiles; allogenic transplant; recipient; TH2 response; tunour; viral growth; fungal growth; vaccine; allergic response; ss; reverse translation. Human cytokine receptor subunit 5 (DCRS5) reverse translation

Homo sapiens.

WO200185790-A2

15-NOV

10-MAY-2001; 2001WO-US015057

8 8 8 8 8 8

중 음 중 음

10-MAY-2000; 2000US-0203426P

SCHERING CORP

Z Kastelein **₹** Moore XW. Parham £

2002-062238/08.

Novel DNAX cytokine receptor subunit 5 polypeptide which is subunit of receptor complex for p40/II-B30, useful for treating conditions associated with abnormal expression or triggering of response to p40/II B30 ligand. P40/IL-

Disclosure; Page 13; 74pp; English.

ð 밁 ક

음 성

The present DNA sequence represents a reverse translation of the human DNAX cytokine receptor subunit 5 (defined as DCRS5 or IL30 receptor) of the invention. DCRS5 is a member of the class I branch of the cytokine

1078

1018 840

```
receptor superfamily and is closely related to the IL-6 receptor subunit cytokines are soluble molecules which play a critical role in controlling the complex cellular cinteractions of the immune response. The invention comprises novel receptors related to cytokine receptors designated DNAX cytokine receptor subunits (DCRS). Specifically the invention comprises a subunit (DCRS) for a receptor complex for the p40/IL-B30 ligand. The DCRS5 proteins of the invention are useful for treating diseases or disorders associated the invention are useful for treating diseases or disorders associated with abnormal expression or abnormal triggering of response to the p40/IL-B30 ligand. The proteins of the invention can be used to modulate the physiology or development of a cell from a host which exhibits TH1-mediated disease; multiple sclerosis; rheumatoid arthritis; osteoarthritis; inflammatory bowel disease; diabetes; psoriasis; sepsis; an allogenic transplant recipient; chromic TH2 response; tumour; viral or fungal growth; vaccine recipient; or an allergic response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Simi
Matches 1106;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1887 BP; 421 A; 183 C; 245 G; 257 T; 0 U; 781 Other;
                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  119 ATGAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCCTTTACATACTCTTCAGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
#SINGCINGCINGTH#SINMGINGCINGARACNATHAAYGCINACINGTINCCINAARACNATHATH
                                                                                                            TCTGCAGCCGTCATTTCCAGGGCTGAGACCTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                   CATGTGAAGAGTTTAGAGACAGAAGAAGAAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                        TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT ||:||:||:||:||:||:|::::TGYACNGCNGARTGYCCNAARCAYTTYCARGARACNYTNATHTGYGGNAARGAYATHWSN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCNMGNAARYTNCAYTTYTAYAARAAYGGNATHAARGARMGNTTYCARATHACNMGNATH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGAAYCAYGTNACNATHCARTGGGAYGCNGTNATHGCNYTNTAYATHYTNTTYWSNTGG
                                                                                                                                                                                                                                                                                                                                        CAYGTNAARWSNYTNGARACNGARGARGARCARCARTAYYTNACNWSNWSNTAYATHAAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGYCAYGGNGGNATHACNAAYATHAAYTGYWSNGGNCAYATHTGGGTNGARCCNGCNACN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative 491; Mismatches 290; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    48.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 1379;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          <u>=</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 1887;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              42C
                                                                                 720
                                                                                                                           838
                                                                                                                                                                                                           778
                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                5
                                                                                                   밁
                                                                                                                                    S
                                                                                                                                                                                    В
                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                      멍
                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                             Дb
                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                       1681
                                                                                                                                                                                                                                                                                                                                                            1561
                                                                                                                                                                                                                                                                                                                                                                                                      1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           999
                      GTGAATGAGGAGTTGCCATCTAATTACTTATTTTCCACAAAATATTTTTGGAAAGCCAC
                                                                                                       AATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGTGTGAATTCACTA
||:||:|:::::||:::::||:::::|
AAYCCNMGNYTNCARAARCAYCCNAAYTTYGCNTTYMSNGTNWSNMSNGTNAAYWSNYTN
                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGAAGAATACAGGACCCCTGGAGACA | | : | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MGNGAYTAYCCNCARAAYWSNYTNTTYGAYAAYACNACNGTNGTNTAYATHCCNGAYYTN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CARGINACNWSNAARGCNITYCARCAYGAYACNIGGAAYWSNGGNYINACNGINGCNWSN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                         CCNGAYATHCARAAYWSNGTNGARGARGARACNACNATGYTNYTNGARAAYGAYWSNCCN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MGNACNGGNATHAARMGNMGNATHYTNYTNYTNATHCCNAARTGGYTNTAYGARGAYATH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATHWSNACNGGNCAYYTNACNWSNGAYAAYMGNGGNGAYATHGGNYTNYTNYTNGGNATG
```

5

음 성 음

문

1978 1800 1918 1680

1858

1560

1500

1498

1318 1140

1380

음 &

8 & 8

유영

S 밁 중 유 S

유 밁 성 유 S

밁

```
RESULT 10
AAF87819
ID AAF877
XX AAF87
XX AAF87
XX AAF87
XX III-JU
XX Human
XX Human
XX Homo
XX Homo
XX Homo
XX WO200
XX WO200
XX WO200
XX WO200
XX WO3-AH
XX 27-SE
PR 03-AH
XX 27-SE
PR 03-AH
XX PF 103-AH
XX WP1
DR WF-PSI
XX WP1
CCC desir
XX Claim
XX The F
CCC desir
XX Claim
XX The F
CCC active
CCC
                     밁
                                                 S
                                                                              밁
                                                                                                                    श्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                               밁
                                                                                                                                                                                           र्
                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 1324; Conserv
                                                                                                                                                                                                                                                                                                                                             The present sequence encodes a human haemopoietin receptor protein NR12 designated NR12.2. NR12 has immunosuppressive and antiallergic activities. NR12 can be used for searching for haemopoietin factors with the potential for controlling autoimmune disease, tissue rejection and allergies against e.g. metals and pollen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New hemopoietin receptor protein NR12 useful for screening for new binding factors for potential treatment of autoimmune disease, tissue rejection and allergies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; haemopoietin receptor protein; NR12; immunosuppressive; antiallergic; haemopoietin factor; autoimmune disease; tissue metal allergy; pollen allergy; ss.
                                                                                                                                                                                                                                                                                                                  Sequence 1479 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27-SEP-1999; 99JP-00273358.
03-AUG-2000; 2000JP-00240397.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human haemopoietin receptor protein NR12.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAF87819;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAF87819 standard; cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Fig 5; 140pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-SEP-2000; 2000WO-JP006654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200123556-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (CHUG-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001-266154/27.
DB; AAB74964.
                     127
                                                     148
                                                                                          67
                                                                                                                                                                                                     28
                                                                                                                                                                    7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHUGAI RES INST MOLECULAR MEDICINE
                                      AGTAATAGCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATATAAACTG
                                                                                                               AGAGGGAAACAGTCTTTTCCTGCTTCCAGACATGAATCAKGTCACTATTCAATGGGATGC
                                                                                                                                                                  CAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGTGGAATTATGTGCTTCAAACAGGTTGAA
                                                                                                                                                                                           CAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGTGGAATTATGTGCTTCAAACAGGTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTCAATAGGATTTCACTCTTGGAAAAG 2005
||:||:||:||:||:
TTYAAYMGNATHWSNYTNYTNGARAAR 1887
                   AGTAATAGCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATATAAACTG
                                                                                            AGAGGGAAACAGTCTTTTCCTGCTTCCAGACATGAATCAGGTCACTATTCAATGGGATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Yaguchi N;
                                                                                                                                                                                                                                      46.3%;
nilarity 99.5%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag= a
/product= "NR12.2"
                                                                                                                                                                                                                                                                                                                503 A; 292 C; 298 G; 386 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "haemopoietin receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1479
                                                                                                                                                                                                                                       Score 1322.8;
Pred. No. 0;
2; Mismatches
                                                                                                                                                                                                                                         2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                encoding cDNA SEQ
                                                                                                                                                                                                                                                                              DB
                                                                                                                                                                                                                                         4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein'
                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                  u; 0
                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                  Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tissue rejection;
                                                                                                                                                                                                                                                                              1479;
                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ħ
                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NO: 3.
                                                                                                                                                                  66
                     186
                                                       207
                                                                                          126
                                                                                                                              147
                                                                                                                                                                                                                                         0
                                  밁
                                                                 ঠ
                                                                                                           맑
                                                                                                                                           ঠ
                                                                                                                                                                                    문
                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                   뭕
                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                        망
                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
S
                                                                                                                                               1168
                                                                                                                                                                                      1087
                                                                                                                                                                                                                                                             1027
                                                                          1228
                                                                                                                                                                                                                        1108
                                                                                                                                                                                                                                                                                               1048
                                                                                                                                                                                                                                                                                                                                   967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     307
                                                                                                                                                                                                                                                                                                                                                                      988
                                                                                                                                                                                                                                                                                                                                                                                                            907
                                                                                                                                                                                                                                                                                                                                                                                                                                               928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGTTTCCTGTGAAATGAGATACAAGGCTACAACAAACCAAACTTGGAATGTTAAAGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTAACCTGTGTCATTTATGAATATTCAGGCAACATGACTTGCACCTGGAATGCTRGGAA 567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCTGGCCACATCTGGGTAGAACCAGCCACAATTTTTAAGATGGGGTATGAATATCTCTAT
                                                                                                                                  CAGAGGAGACATTGGACTTTTATTGGGAATGATCGTCTTTGCTGTTATGTTGTCAATTCT
                                                                                                                                                                                    CGTATTTCAAGTGAGATGTCAAGAAACAGGCAAAAGGTACTGGCAGCCTTGGAGGTTCACC 1047
                                                                                                                                                                                                                                                                                                                                                                                                                              TGACACCAATTTTACATATGTGCAACAGTCAGAATTCTACTTGGAGCCAAACATTAAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATAAATGCTACAGTGCCCAAGACCATAATTTATTGGGATAGTCAAACAACAATTGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAAATTCACCTGGATGATATAGTGATACTTTCTGCAGCCGTCATTTCCAGGGCTGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCAAATTCACCTGGATGATATAGTGATACCTTCTGCAGCCGTCATTTCCAGGGCTGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAGTACTTGGTTTGGGTCCAAGCAGCAAACGCACTAGGCATGGAAGAGTCAAAACAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAGTACTTGGTTTGGGTCCAAGCAGCAAACGCACTAGGCATGGAAGAGTCAAAACAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCTCACCTACATAGACACAAAATACGTGGTACATGTGAAGAGTTTAGAGACAGAAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTCACCTACATAGACACAAAATACGTGGTACATGTGAAGAGTTTAGAGACAGAAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGAGACACTGATATGTGGAAAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATCAAAGAAAGATTTCAAATCACAAGGATTAATAAAACAACAGCTCGGCTTTGGTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATCAAAGAAAGATTTCAAATCACAAGGATTAAATAAAACAACAGCTCGGCTTTGGTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATTGCCAAGCAGCAATTAAGAACTGCCAACCAAGGAAACTTCATTTTTATAAAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATATTGCCAAGCAACTAAGAACTGCCAACCAAGGAAACTTCATTTTATAAAAATGG
 GTTAATACCAAAGTGGCTTTATGAAGATATTCCTAATATGAAAAACAGCAATGTTGTGAA
                                                           TTCTTTGATTGGGGATATTTAACAGATCATTCCGAACTGGGATTAAAAGAAGGATCTTATT
                                                                                                                                                                                                                                                             GTTTTTTCATAAAACACCTGAAACAGTTCCCCAGGTCACATCAAAAGCATTCCAACATGA
                                                                                                                                                                                                                                                                                               GITTTTTCATAAAACACCIGAAACAGITCCCCCAGGICACATCAAAAGCATTCCAACATGA 1107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTTTCCTGTGAAATGAGATACAAGGCTACAACAAACCAAACTTGGAATGTTAAAGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TATAAATGCTACAGTGCCCAAGACCATAATTTATTGGGATAGTCAAACAACAATTGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGTAACCTGTGTCATTTATGAATATTCAGGCAACATGACTTGCACCTGGAATGCTGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGAGACACTGATATGTGGAAAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCTTTGATTGGGATATTTAACAGATCATTCCGAACTGGGATTAAAAGAAGGATCTTATT
                                                                                                               CAGAGGAGACATTGGACTTTTATTGGGAATGATCGTCTTTGCTGTTATGTTGTCAATTCT
                                                                                                                                                                                                                                                                                                                                                                                                            TGACACCAATTTTACATATGTGCAACAGTCAGAATTCTACTTGGAGCCAAACATTAAGTA
                                                                                                                                                                                                                                                              1086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              627
                                                                                                                                                                                        1146
                                                                                                                                                                                                                                                                                                                                                                                                                                                 987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     366
                                                                                                                                                                                                                          1167
                                                                                                                                                                                                                                                                                                                                                                                                                966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            387
                                                                                                               1206
                                                                                                                                                   1227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       246
                                          1266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                306
```

```
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
ફ
                    밁
                                                             밁
                                                                           १
                                                                                                      Query Match
Best Local Similarity
Matches 1236; Conserv
                                                                                                                                                                  The present sequence encodes a human haemopoietin receptor protein NR12 designated NR12.4. NR12 has immunosuppressive and antiallergic activities. NR12 can be used for searching for haemopoietin factors with the potential for controlling autoimmune disease, tissue rejection and allergies against e.g. metals and pollen
                                                                                                                                                                                                                                                     New hemopoietin receptor protein NR12 useful for screening for binding factors for potential treatment of autoimmune disease, rejection and allergies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; haemopoietin receptor protein; NR12; immunosuppressive; antiallergic; haemopoietin factor; autoimmune disease; tissue metal allergy; pollen allergy; ss.
                                                                                                                                                                                                                                    Claim
                                                                                                                                                                                                                                                                                                                                  Maeda
                                                                                                                                                                                                                                                                                                                                                                           03-AUG-2000; 2000JP-00240397
                                                                                                                                                                                                                                                                                                                                                                                                           27-SEP-2000; 2000WO-JP006654
                                                                                                                                                                                                                                                                                                                                                                                                                                05-APR-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200123556-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAF87821;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAF87821 standard; cDNA; 1301
                                                                                                                                                Sequence 1301 BP; 432 A; 253 C; 262 G; 354
                                                                                                                                                                                                                                                                                                                                                                                     27-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                      (CHUG-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                                                                                                                                                            2001-266154/27.
                                                                                   119
                                                                                                                                                                                                                                                                                                                                 Z,
                                                                                                                                                                                                                                1; Fig 11; 140pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      haemopoietin receptor protein NR12.4 encoding cDNA SEQ
                      13
                                                                                                                                                                                                                                                                                                   AAB74966.
                                                                                                                                                                                                                                                                                                                                                      CHUGAI RES INST MOLECULAR
                                                                                                                                                                                                                                                                                                                                 Yaguchi N;
                                 TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                          ATGAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCCTTTACATACTCTTCAGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATGCTACAG 1336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATGCTACAG 1357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA
                                                               ATGAATCAGGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG
                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /product= "NR12.4"
/note= "haemono:
                                                                                                                                                                                                                                                                                                                                                                                     99JP-00273358.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           entry)
                                                                                                                43.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "haemopoietin
                                                                                                       2
                                                                                                                 Score 1236.6;
Pred. No. 7.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВÞ
                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                       MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        receptor protein"
                                                                                                                6; DB 5;
                                                                                                                                                T; 0 U; 0
                                                                                                        Indels
                                                                                                                          Length
                                                                                                                                                 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tissue rejection;
                                                                                                                            1301;
                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NO: 7.
                                                                                                        Gaps
  298
                                         238
                                                               60
                                                                                   178
                      120
                                                                                                       0
                                               S
                                                                       밁
                                                                                                             밁
                                                                                                                                  S
                                                                                                                                                                         Ş
                                                                                                                                                                                                  밁
                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                    닭
                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
           S
                               뭐
                                                                                       5
                                                                                                                                                          밁
                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 멼
            1319
                                1141
                                                                       1081
                                                                                             1199
                                                                                                                                      1139
                                                    1259
                                                                                                                 1021
                                                                                                                                                                               1079
                                                                                                                                                                                                                         1019
                                                                                                                                                                                                     901
                                                                                                                                                           961
                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                   959
                                                                                                                                                                                                                                                                                                                                                      839
                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                          719
                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                             668
                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                               779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             299
                                                                                                                                                                                                                                                                                                                                                                          ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                          CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTTCTGGGCTAACAGTTGCTTCC 1138
                                                                                                                                                                                                                AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                                                         GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                  ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                             TATTGGGATAGTCAAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                 GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACGATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAG
                                            CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                   ATCGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTTAACAGATCATTC
                                                                                                                                                          CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                             GAATTCTACTTGGAGCCAMACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                                                  TATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                      GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                          ATCGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTC
                                                                                                                                                                                                     AAAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAAAACAGTTCCC
                                                                                                                                                                                                                                                                                         ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                             1258
                                                                                                                                       1198
                                                     1318
                                                                          1140
                                                                                                                   1080
                                                                                                                                                            1020
                                                                                                                                                                                                                           1078
                                                                                                                                                                                                                                                                    1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        598
                                 1200
                                                                                                                                                                                                      960
                                                                                                                                                                                                                                                                                          840
                                                                                                                                                                                                                                                                                                              958
                                                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                                                                       898
                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                                                                  838
                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                           778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
```

```
S
                                                                                                  밁
                                                                                                                       중 유
                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                            문
                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 1151; Conserv
                                                                                                                                                                                                                                                                                                                                                                       The present invention describes a composition (I) comprising a recombinant DNAX cytokine receptor subunit-2 (DCRS2) polypeptide. The DCRS2 polypeptide is useful for binding ligands and for preparing antibodies. The DCRS2 polypeptide is also useful for modulating cell proliferation, for diagnostic and therapeutic applications, for detecting presence of their ligands and in drug screening assays. It is also useful for treating conditions such as immunological disorders. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel composition comprising DNAX cytokine receptor subunit polypeptide useful for regulating immune system function and for treating immunological disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; DNAX cytokine receptor subunit; DCRS2; receptor protein; modulating cell proliferation; diagnosis; detection; drug scree immunological disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-061536/07.
P-PSDB; AAB36646.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAC88149;
                                                                                                                                                                                                                                                                                                                                  Sequence 1155 BP; 387 A; 233 C; 223 G; 312 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 16; Page 10-11; 93pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dowling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-MAY-2000; 2000WO-US014867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200073451-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human DNAX cytokine receptor subunit-2 encoding cDNA SEQ ID NO:1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAC88149
                                                                                                                                                                                                                                                                                                                                                              sequence encodes the human DCRS2 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (SCHE )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1201
                 359
                                            181
                                                                       299
                                                                                                   121
                                                                                                                              239
                                                                                                                                                                                       179
                                                                                                                                                                                                                                  119 ATGAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG
                                                                                                                                                           13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SCHERING CORP.
AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                             ATTTTTAAGATGGGTATGAATATCTCTATATATTTGCCAAGCAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                           TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                           TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       standard; cDNA; 1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAG 1239
                                                                                                                                                                                                                   ATGAATCAGGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG
                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Timans JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-00322913
                                                                                                                                                                                                                                                                                     39.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gorman DM,
                                                                                                                                                                                                                                                                          2;
                                                                                                                                                                                                                                                                                      Score 1140.6; DB 4; Length 1155; Pred. No. 5.3e-273;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ВP
                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kastelein RA,
                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bazan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ĘĮ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         screening;
                                                                                                                                                                                                                                                                         ۲.
                                                                                                                                                                                                                                                                          Gaps
                                                                       358
                                                                                                   180
                                                                                                                                298
                                                                                                                                                                                                                   60
                418
                                                                                                                                                         120
                                                                                                                                                                                       238
                                                                                                                                                                                                                                                178
 RESULT 13
ADC07176
ID ADC07
XX
AC ADC07
XX
AC ADC07
XX
AC ADC07
XX
AC ADC07
XX
XX
DT 18-DE
XX
DB DNA e
                                                                                                                                                                                                   S
                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                          밁
                DNA encoding
                                            18-DEC-2003
                                                                                                   ADC07176
                                                                                                                                                                          1141
                                                                                                                                                                                                                                  1081
                                                                                                                                                                                                                                                            1199
                                                                                                                                                                                                                                                                                        1021
                                                                                                                                                                                                                                                                                                                      1139
                                                                                                                                                                                                                                                                                                                                                                             1079
                                                                                                                                                                                                                                                                                                                                                                                                                                      1019
                                                                                                                                                                                                                                                                                                                                                                                                           901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                  961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 839 TATTGGGATAGTCAAACAACAATTGAAAAGGTTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAATTCTACTTOGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                     standard;
                                                                                                                                                                                          CCGAACTGGGATTAA 1272
                                                                                                                                                                                                                                 CAGGTCACATCAAAAGCATTCCCAACATGACACATGGAATTCTGGGCTTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                         AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                           AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCCTGAAACAGTTCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGGGAGTGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TATTGGGATAGTCAAACAACAATTGAAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCTCCACTGATTCATTACAAGGCGGCAAGAAGTACTTGGTTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGGTTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATGTGAAGAGTTTTAGAGACAGAAGAAGAAGCAACCAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATGTGAAGAGTTTAGAGACAGAAGAAGAGAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                         ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                          ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                                                                  CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                           CCGAACTGGGATTAA 1155
                human DNAX cytokine receptor subunit 2 (DCRS2)
                                            (first entry)
                                                                                                     CDNA; 1155
```

900

958

780 898 720 838 660 778 600 718 540 658 480 598 420 538 360 478

840

1078

1138

960

```
S
                                                                                   밁
                                                                                                                                                                                                       밁
                                                                                                            ঠ
                                                                                                                                                                                                                              The invention describes a composition of matter (I) comprising a substantially pure or recombinant DNAX cytokine receptor subunit 2 (DCRS2) polypeptide, a natural DCRS2 polypeptide, or a fusion protein comprising a DCRS2 sequence. A composition of matter comprises: a substantially pure or recombinant DCRS2 polypeptide comprising at least three distinct nonoverlapping segments of at least four amino acids cidentical to segments of a fully defined 394 amino acid sequence (S1), given in the specification, a substantially pure or recombinant DCRS2 given in the specification, a substantially pure or recombinant DCRS2 polypeptide comprising at least two distinct nonoverlapping segments of at least five amino acids identical to segments of S1; a natural sequence DCRS2 comprising S1; or a fusion polypeptide comprising a DCRS2 sequence. An agonist or antagonist of a mammalian DCRS2 is useful for modulating physiology or development of a cell or cell culture. Antibodies to a DCRS2 can be used for quantitative detection of interferon. The DCRS2 polypeptides and nucleic acids and their binding agents are potentially useful in treating and diagnosing disease, especially disease associated with the immune system. This sequence encodes humna DNAX cytokine
                                                                                                                                             Query Match
Best Local Similarity
Matches 1151; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Composition potentially useful for treating immunological disorders, comprises a DNAX cytokine receptor subunit 2 (DCRS2) polypeptide, a natural DCRS2 polypeptide, or a fusion polypeptide comprising a DCRS2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (DOWL/)
(TIMA/)
(GORM/)
(KAST/)
                                                                                                                                                                                                       Sequence 1155 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 16; SEQ ID NO 1; 41pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUN-1999; 99US-0137159P.
31-MAY-2000; 2000US-00588113.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-730048/69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-SEP-2002; 2002US-00247463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2003082734-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dowling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       immune system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (BAZA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cytokine receptor subunit 2; DCRS2; cell physiology; development; cell culture; interferon detection;
                                                        179
                                                                                                                   119
                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TIMANS J C.
GORMAN D M.
KASTELEIN R A.
BAZAN J F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADC07177.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LM, Timans JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DOWLING L M.
                                            TGTCATGGAGGAATTACAAATATAAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                      ATGAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCCTTTACATACTCTTCAGCTGG
ATTTTAAGATGGGTATGAATATCTCTATATATTGCCCAAGCAGCAATTAAGAACTGCCAA
                            TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                     ATGAATCAGGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG
                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     disorder; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-0137159P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
1. .1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag= a
/product= "DCRS2"
                                                                                                                                                                                                     387 A; 233 C;
                                                                                                                                                         39.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "DNAX cytokine receptor subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gorman
                                                                                                                                  Score 1140.6; DB 10; Pred. No. 5.3e-273; Indels
                                                                                                                                                                                                       223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ¥,
                                                                                                                                                                                                     G; 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kastelein
                                                                                                                                                                                                  Ŧ;
                                                                                                                                                                         DB 10; Length 1155;
                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ₽,
                                                                                                                                                                                                     ς;
                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bazan
                                                                                                                                                                                                       Other;
                                                                                                                                             1:
                                                                                                                                             Gaps
                                                        238
                                                                                      60
                                                                                                                  178
                           120
                                                                                                                                             1:
                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                            밁
                                                                    δ
                                                                                                  밁
                                                                                                                        5
                                                                                                                                                         밁
                                                                                                                                                                                   Ś
                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
 RESULT
 14
                                            1141
                                                                                                                               1199
                                                                                                                                                            1021
                                                                                                                                                                                        1139
                                                                                                                                                                                                                                                1079
                                                                                                                                                                                                                                                                                                          1019
                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                    959
                                                                                                                                                                                                                                                                                                                                                                                                                            899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         299
                                                                                                                                                                                                                                                                                            AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                      GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCTGCAGCCGTCATTTCCAGGGCTGAGACCTATAAATGCTACAGTGCCCCAAGACCCATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCACTAGGCATGGAAGAGTCAAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATGTGAAGAGTTTAGAGACAGAAGAAGAAGAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATGTGAAGAGTTTAGAGACAGAAGAAGAGCCAACAGTATCTCACCTCCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCGAACTGGGATTAA
                                                                                                                           ATCGTCTTTGCTGATGTTGATTCTTTCTTTGATTGGGATATTTAACAGATCATT-
                                                                                                                                                                                                                     CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                  CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                        GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                           TATTGGGATAGTCAAACAACTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCAAGGAAACTTCATTTTATAAAAATGGCATCAAAGAAAAGATTTCAAATCACAAGGATT
                                                                                                    ATCGTCTTTGCTGTTATGTTGTCAATTCTTTTGATTGGGATATTTAACAGATCATTC
                                                                                                                                                            ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                         ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                               AAAAGGTACI
                                                                                                                                                                                                                                                                                                                                                                                                  ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCTCCACTGATTCATTACAAGGCGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                            1155
                                                                         1272
                                                                                                      1140
                                                                                                                                 1257
                                                                                                                                                            1080
                                                                                                                                                                                         1198
                                                                                                                                                                                                                                                   1138
                                                                                                                                                                                                                                                                                                            1078
                                                                                                                                                                                                                                                                                                                                                                    1018
                                                                                                                                                                                                                        1020
                                                                                                                                                                                                                                                                                960
                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                               958
                                                                                                                                                                                                                                                                                                                                                                                                                                                         780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
```

```
맑
                र्
                                           片
                                                                         र्
                                                                                                       Query Match
Best Local Similarity
Matches 1151; Conserv
                                                                                                                                                                                   The invention relates to a composition (I) of matter chosen from a substantially pure or recombinant DNAX cytokine receptor subunits 2 (DCRS2) polypeptide. Purther disclosed is a substantially pure or isolated antigenic DCRS2 polypeptide (II) of (I), a fusion polypeptide (III) of (I) and a method for modulating (MI) the physiology or development of a cell or tissue culture cells comprising contacting the cell with an agonist or antagonist of a mammalian DCRS2. (MI) is useful for modulating the physiology or development of a cell or tissue culture cells. (I)-(III) are useful for diagnosing or treating immunological disorders. The current sequence represents the nucleotide sequence of DNAX cytokine receptor subunit 2 (DCRS2).
                                                                                                                                                                                                                                                                                                                                                                            Composition useful for diagnosing or treating immunological disorders, comprising pure or recombinant DNAX cytokine receptor subunits 2 (DCRS2) polypeptide or its fusion polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUN-1999; 99US-0137159P
31-MAY-2000; 2000US-00588113
18-SEP-2002; 2002US-00247463
                                                                                                                                                              Sequence 1155 BP;
                                                                                                                                                                                                                                                                                                                                                  Disclosure; SEQ ID NO 1; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-DEC-2004; 2004US-00016106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2005106673-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADZ65011;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADZ65011 standard; DNA; 1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19-MAY-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Primates.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Immunomodulator; cell growth; DNAX cytokine receptor subunits
immune disorder; gene; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNAX cytokine receptor subunit 2 (DCRS2) DNA, seq id
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-JUL-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (SCHE ) SCHERING CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 2005-365817/37.
                          179
 19
                                                    ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3
                                                                                                                                                                                                                                                                                                                                                                                                                                      ADZ65012.
               TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                    ATGAATCAGGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG
                                                                   ATGAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCCTTTACATACTCTTCAGCTGG
 TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Timans JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag= b
/product=
1. .69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag= a
70. .1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     product=
                                                                                                                                                            387 A; 233 C; 223 G; 312 T; 0 U; 0 Other;
                                                                                                                     39.9%;
99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ۵
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gorman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Mature DCRS2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "DNAX cytokine receptor subunit 2 (DCRS2)"
                                                                                                        N
7:
                                                                                                     Score 1140.6; DB 14; Length Pred. No. 5.3e-273; Pred. No. 5.3e-273; Indels 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         쁑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ŋ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kastelein RA,
                                                                                                                                 DB 14; Length 1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bazan
                                                                                                        ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2
                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DCRS2;
 120
                          238
                                                  60
                                                                               178
                               ঠ
                                                                밁
                                                                                        8
                                                                                                                     밁
                                                                                                                                        र्
                                                                                                                                                                         밁
                                                                                                                                                                                                  ş
                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ર્જ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                               밁
                                                                                             1199
                                                                                                                                               1139
                                                                                                                                                                                                                                                         1019
                                                                                                                                                                                                     1079
                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               719
                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                                                              959
                                                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                                                  699
                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                      839
                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     239
                                                                                                                                                                                        CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC 1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCAAGGAAACITCATITTTATAAAAATGGCATCAAAGAAAGATTTCAAATCACAAGGATT
              CCGAACTGGGATTAA 1155
                            CCGAACTGGGATTAA 1272
                                                                                                                                                                                                                                              AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAAACACCTGAAACAGGTTCCC 1078
                                                                                                                                                                                                                                                                                    GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                    GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC 1018
                                                                                                                                                                                                                                                                                                                                        ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                        ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                              TATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCTCCACTGATTCATTACAAGGCGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                  ATCGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTC 1140
                                                                                   ATCGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGGATATTTAACAGATCATT-
                                                                                                                      ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                               ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                         CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                                                              TATTGGGATAGTCAAACAACTTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                            1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         478
                                                                                              1257
                                                                                                                         1080
                                                                                                                                                 1198
                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                     958
                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                 960
                                                                                                                                                                                                                                                                                      900
                                                                                                                                                                                                                                                                                                                                                                                                                         898
                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   358
```

```
ARDSULT 15
ARDJART
ARDJART
ID ARDJA
XX ARDJAR
XX ARDJAR
XX ARDJAR
AC ARDJAR
XX ARDJAR
AC ARDJAR
AC ARDJAR
XX ARDJAR
XX ARDJAR
XX MOUSE
XX 
                    CC polypeptides HPRI and HPRZ. Sequences of the invention are useful for CC treating cell proliferation conditions e.g., pancytopaenia, leukopaenia, canaemia, thrombocytopaenia, neurodegenerative disorders and osteoporosis CC resulting from a lack of bone-forming cells. They are also useful for CC treating cell proliferation conditions such as leukaemia and tumour CC metaatasis, osteoporosis resulting from an excess of bone-resorbing CC cells. HPR sequences are also useful for treating medical conditions and CC diseases such as cell proliferation, metabolic and reproductive hormone CC related conditions. They are useful for treating warious haematologic and CC oncologic disorders e.g., Epstein-Barr virus-positive nasopharyngeal CC carcinoma, myelogenous leukaemia, colon, stomach, prostate, renal cell, CC carcinoma, myelogenous leukaemia, colon, stomach, prostate, renal cell, CC carcinoma, carcinoma (e.g., adenocarcinoma (for example, breast cancer), squamous cell carcinoma), haematologic disorders, anaemias (e.g., anaemia (e.g., anaemia, carcinoma), carcinoma), haematologic disorders, anaemias (e.g., anaemia (e.g., anaemia, colon), stomatologic anaemia, colon, stomatologic anaemia (e.g., anaemia, colon), stomatologic anaemia, colon, stomatologic anaemia (e.g., anaemia, colon), stomatologic anaemia, colon, stomatologic anaemia, colon, stomatologic anaemia (e.g., anaemia, colon), stomatologic anaemia (e.g., anaemia, colon, stomatologic anaemia, colon, stomatologic anaemia (e.g., anaemia, colon, stomatologic anaemia, colon, stomatologic anaemia (e.g., anaemia, colon, stomatologic anaemia (e.g., anaemia, colon, stomatologic anaemia, colon, stomatologic anaemia, colon, stomatologic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 pancytopaenia; leukopaenia; anaemia; thrombocytopaenia; osteoporosis; neurodegenerative disorder; leukaemia; carcinoma; haematologic disorder; cancer; myelodysplastic syndrome; idiopathic thrombocytopaenic purpura; ITP; sickle cell vasocclusive crisis; myelofibrosis; myeloid metaplasia; osteoclast disorder; periodontitis; acute polyneuropathy; Bell's palsy; anorexia neurosa; chronic fatigue syndrome; Creutzfeld-Jacob disease; demyelinating neuropathy; Guillain-Barre syndrome; Guil war syndrome; vertebral disc disease; myasthenia gravis; chronic neuronal degeneration;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-OCT-2000; 2000US-0238706P
13-OCT-2000; 2000US-0240476P
20-FEB-2001; 2001US-0270282P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-OCT-2001; 2001WO-US031634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           stroke; fatigue; tumour; sarcoma; osteoporosis; obesity; infertility;
ischaemic disease; gene; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention relates to human and murine haematopoietin receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ( VMMI)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200229060-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAD38777;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAD38777 standard; DNA; 1935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2002-330172/36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and murine hematopoietin receptor polypeptides HPR1 and HPR2, l for treating cell proliferation, metabolic, and reproductive ne related conditions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        haematopoietin receptor 2 (HPR2) DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9; Page 135-136; 136pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  힏
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     haematopoietin receptor; receptor; HPR1; HPR2; cell proliferation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAE24038.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IMMUNEX CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mosley BA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /*tag= a
/product= "Mouse HPR2 protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag=
        osteoclast
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bird
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TA,
        disorders that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dubose
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RF,
        lead to bone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wiley
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      reproductive
```

```
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
     S
                                           밁
                                                                        Ś
                                                                                                          뭐
                                                                                                                                  5
                                                                                                                                                                          밁
                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    នន្តន្តន្តន្តន្តន្តន្ត្
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 1468;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               osteoporosis including post-menopausal osteoporosis, periodontitis resulting in tooth loosening or loss, prosthesis loosening after joint replacement, neurodegenerative conditions (e.g., acute polyneuropathy, Bell's palsy, anorexia nervosa, chronic fatigue syndrome, transmissible dementia including Creutzfeld-Jacob disease, demyelinating neuropathy, guillain-Barre syndrome, vertebral disc disease, Gulf war syndrome, myasthenia gravis, chronic neuronal degeneration, stroke including cerebral ischaemic diseases. HPRI and HPR2 polypeptides are also useful for treating various other disorders such as osteoporosis, obesity, deficient mammary development and infertility. The present sequence is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1935 BP;
                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                           659
                                                                                                                                                                                                                                                                                                                                                                                                              539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                721
                                                                           839
                                                                                                            661
                                                                                                                                                                          109
                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                            599
                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   119 ATGAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                               GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                                                                                                                                                                                             CATGTGAAGAGTTTTAGAGACAGAAGAAGAAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                AACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                         TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                               ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                             CATGTGAAGAGTTTGGAGACAGAAGAAGAACAATATCTTGCCTCAAGCTATGTTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTGGACATCCACCGGATGCCCCCAGCAATCTGACATGTGTCATTTATGAATACTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGCACTGCTGAATGTCCTGGTCATTTTCAAGAGACACTGATTTGTGGGAAAGACATTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATAGAACAACAGCTCGGATTTGGTATAAAGGCTTTTTCGGAACCTCATGCCTATATGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCAAGGAATCTTTACTTTATAAAAATGGCTTCAAAGAAGAATTTGATATCACAAGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGAGTCACCTCACACTTCAGCTGCATGTGGTGATAGCCCTTTATGTGCTCTTCAGATGG
                                                TACTGGAAAAGCAAAACTATGATTGAGAAAGTATTCTGTGAGATGAGATACAAAAACAACA
                                                                             TATTGGGATAGTCAAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                            ATCTCCACTGACTCACTGCAAGGCAGCAGGAAGTATTTGGTATGGGTCCAAGCTGTCAAT
                                                                                                                                                                                                                                                                                                                                                                               AACATGACATGCACCTGGAACACTGGGAAGCCTACCTACATAGATACCAAGTATATTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCAAGGAAACTTCATTTTTATAAAAATGGCATCAAAGAAGATTTCAAATCACAAGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTCACGGAGGAATCACAAGTATAAACTGCTCTGGTGACATGTGGGGTTGAGCCTGGTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  607 A; 420 C; 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   38.7%;
75.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1105.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1105.8; DB 6
No. 2.9e-264;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    G; 523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Η,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ou;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1935;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                              658
                                                                                                                                                                                                                                                                                                                                                                                                               598
                 958
                                                780
                                                                               898
                                                                                                            720
                                                                                                                                             838
                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
```

1975 1902	1916 ATCGTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGC	
1915 1842	856 CCCAGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTTGGGG	
1855 1782	796 TCTCCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCA	
1795 1722		
1735 1662	676 AATAATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGTGTGAATTCA	
1675 1607	616 AATAATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGA	
1615 1557	556 CTCAACACTGGATATAAACCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGC	
1555 1497	6 ACAAGAGACTACCOGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTTCCTGAT	
1495 1437	439 TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAG	
1438 1377	9 AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC	
1378 1317	319 CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT	
1318 1257	259 CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT	
1258 1197	199 ATCGTCTTTGCTGTTATGTTGTCAATTCTTTGTTTGGGATATTTAACAGATCATTC	
1198 1137	139 ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG	
1138 1077	TGGAATTCTGGGCTAACAGTTGCTTCC	
1078 1020	ACAGTTCCC GTCCACCAAACTTCCCAGACAGTTTCC	
1069 960		
900	.TTTCAAGTGAGATGTCAAGAAACAGGC 	

8 8 8 8 8 8 8

8 8 8 8 8 8 8

8 8 8 8 8 8 8 8 8 8 8 8

8 8 8 8 8 8

Search completed: October 14, 2006, 12:53:55 Job time: 1724 secs

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and is
                                                                         1906
1887.6
1887.6
1493.6
1493.6
1322.8
                                                                                                                                                                                                                                                                   2810.2
2810.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-667-289-1
2857.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18892170 seqs, 6143817638 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                October 14, 2006, 13:23:04; Search time 3002 Seconds (without alignments)
                               98.3
728.3
66.7
52.3
443.3
9.3
9.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13:
12:
13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Published Applications NA Main: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | IMMC_Celerra_SIDS3/ptodata/2/pubpna/US07_PUBCOMB.seq:*
| EMC_Celerra_SIDS3/ptodata/2/pubpna/US09A_PUBCOMB.seq:*
| EMC_Celerra_SIDS3/ptodata/2/pubpna/US09A_PUBCOMB.seq:*
| EMC_Celerra_SIDS3/ptodata/2/pubpna/US09A_PUBCOMB.seq:*
| EMC_Celerra_SIDS3/ptodata/2/pubpna/US09B_PUBCOMB.seq:*
| EMC_Celerra_SIDS3/ptodata/2/pubpna/US09C_PUBCOMB.seq:*
| EMC_Celerra_SIDS3/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
| EMC_Celerra_SIDS3/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
| EMC_Celerra_SIDS3/ptodata/2/pubpna/US10D_PUBCOMB.seq:*
| EMC_Celerra_SIDS3/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
| EMC_Celerra_SIDS3/ptodata/2/pubpna/US10G_PUBCOMB.seq:*
| EMC_Celerra_SIDS3/ptodata/2/pubpna/US10G_PUBCOMB.seq:*
| EMC_Celerra_SIDS3/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
| EMC_Celerra_SIDS3/ptodata/2/pubpna/US11A_PUBCOMB.seq:*
| EMC_Celerra_SIDS3/ptodata/2/pubpna/US11B_PUBCOMB.seq:*
| EMC_Celerra_SIDS3/ptodata/2/pubpna/US11D_PUBCOMB.seq:*
| EMC_Celerra_SIDS3/ptodata/SIDSA/PUBPNA/US11D_PUBCOMB.seq:*
| EMC_Celerra_SIDS3/ptodata/SIDSA/PUBPNA/US1DE/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Copyright
2859
2859
2859
2859
2859
2830
2830
2830
2123
11910
11890
1698
1698
11698
11698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version 5.1.9 (c) 1993 - 2006 Biocceleration Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB
                                                     \sigma \sigma
                      0 US-10-667-289-1

US-10-667-290-1

US-09-972-708-19

US-10-715-667-19

US-10-105-930-5

US-10-105-930-9

US-09-972-708-20

US-10-715-667-20

US-09-972-708-22

US-10-715-667-22

US-10-715-667-22

US-10-105-930-3

US-10-247-463-1
                                                                                                                                                                                                                                                                                                                                                                              US-09-853-180-1
US-10-797-157-5
US-10-720-026-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (without alignments)
11702.315 Million cell updates/sec
                      Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 19, Appli
Sequence 19, Appli
Sequence 9, Appli
Sequence 9, Appli
Sequence 20, Appli
Sequence 20, Appl
Sequence 21, Appli
Sequence 22, Appl
Sequence 32, Appli
Sequence 37, Appli
Sequence 7, Appli
Sequence 7, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Description
```

۵	0				0	a	0	0											a	a							
	44	43	42	41					36	35	34	33	32	31	30	29	28	27			24	23	22	21	20	19	18
247.8	248	248	248			248.6	249	249									253.6	254				846.2	1039	1043	1043.4		1105.8
8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.8	8.8	8.8	8.8	8.8	8.9	8.9	8.9	8.9	8.9	8.9	29.6	29.6	36.4	36.5	36.5	38.7	38.7
8259	30652	999	999	177900	212231	44567	661	661	415117	193074	187397	151870	151870	151870	98844	615	615	36871	1000	1000	1152	1152	1784	1071	1071	1935	1935
w	13	12	12	10	6	7	σ	4	10	10	10	9	8	10	10	տ	4	œ	12	12	13	6	თ	œ	ω	œ	ω
US-09-973-278-900	US-11-042-768-26	US-10-301-480-1219099	US-10-301-480-605690	US-10-287-436A-1277	US-10-087-192-1126	US-10-004-113-46	US-09-925-065A-698575	US-09-925-065A-698575	US-10-995-561-13274	US-10-981-277-43	US-10-981-277-42	US-10-741-600-17561	US-10-741-601-5614	US-10-995-561-13199	US-10-467-182-10	US-09-925-065A-738120	US-09-925-065A-738120	US-10-322-281-682	US-10-301-480-1162373	US-10-301-480-548964	US-11-016-106-3	US-10-247-463-3	US-10-105-930-1	US-10-715-667-24	US-09-972-708-24	US-10-715-667-29	US-09-972-708-29
Sequence 900, App		Sequence 1219099,	Sequence 605690,	Sequence 1277, Ap		Sequence 46, Appl	Sequence 698575,	Sequence 698575,	Sequence 13274, A	Sequence 43, Appl	Sequence 42, Appl	Sequence 17561, A	Sequence 5614, Ap	Sequence 13199, A	Sequence 10, Appl	Sequence 738120,	Sequence 738120,	Sequence 682, App	Sequence 1162373,	Sequence 548964,	Sequence 3, Appli	Sequence 3, Appli	Sequence 1, Appli	Sequence 24, Appl	Sequence 24, Appl		Sequence 29, Appl

ALIGNMENTS

US-09-853-180-1

Sequence 1, Application US/09853180 Publication No. US20030017617A1 GENERAL INFORMATION:

```
; TYPE: DNA
; OTGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (119)..(2005)
; OTHER INFORMATION:
US-09-853-180-1
                                                                                        8
                                                                                                                                             밁
S
                                             밁
                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn version 3.1 SEQ ID NO 1 LENGTH: 2859
                                                                                                                                                                                                                                                Matches 2859; Conservative
                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Chirica, Madaline
APPLICANT: Parham, Christi L.
APPLICANT: Parham, Christi L.
APPLICANT: Kastelein, Robert A.
APPLICANT: Moore, Kevin W.
CURRENT APPLICATION NUMBER: US/09/853,180
CURRENT FILING DATE: 2001-05-10
PRIOR APPLICATION NUMBER: 60/203,426
PRIOR APPLICATION NUMBER: 60/203,426
PRIOR FILING DATE: 2000-05-10
NUMBER OF SEQ ID NOS: 5
121 GAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGGTG 180
                                                                              61 GGAATTATGTGCTTCAAACAGGTTGAAAGAGGGAAACAGTCTTTTCCTGCTTCCAGACAT 120
                                                                                                                                                                         1 GTGGTACGGGAATTCCATTGTGTTGGGCAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGT
                                                                                                                                                1 GTGGTACGGGAATTCCATTGTGTTGGGCAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGT
                                                                                                                                                                                                                                           100.0%; Score 2857.4;
100.0%; Pred. No. 0;
vative 0; Mismatches
                                                                                                                                                                                                                                                                                                DB 3; Length 2859;
                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                0; Gaps
                                                     120
                                                                                                                                                     60
                                                                                                                                                                                                60
```

1201 CGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTCCG 1260	1141 CTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATGAT 1200 	1081 GGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCCAT 1140	>>	ATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAA 1	901 AAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGA 960 		781 TGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATTTA 840	721 ACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCTTC 780		601 TGTGAAGAGTTTAGAGACAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAACAT 660			CACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCTTC	361 TAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTACTG 420 	301 AAGGAAACTTCATTTTTATAAAATGGCATCAAAGAAAGATTTCAAATCACAAGGATTAA 360 	241 TTTTANGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTANGAACTGCCAACC 300	181 TCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACAAT 240	
Qy 2281 C	2221	2161	. 2101	Oy 2041 G Db 2041 G	Qy 1981 C		Qy 1861 T	1801	1741 1741		1621	Oy 1561 c		Db 1441 C	1381	1321	1261	Db 1201 C
CTCCATGCCTTTTTAATTTTAGCCATTCTTCTGCCTMATTTCTTAAAATTAGAGAATTAA 2340 CTCCATGCCTTTTTAATTTTAGCCATTCTTCTGCCTMATTTCTTAAAATTAGAGAATTAA 2340	TGTTTCCAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATCAAGAATTCCCGGGAG 2280			GCCTTGCAATCTGAACTTGGGTTTTTCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGA 2100	CATTAGGATTCACTCTTGGAAAAGTAGAGCTGTGTGGTGAAAATCAATATGAGAAAGCT 2040 	GAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTTGGAAAGCCACTT 1980	TGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGITTGGGAATCGT 1920	TGACATACAAAGTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCCAG 1860	CARCACATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGAGAATGCAGTTCTCC 1800		TANTGAANTACTTCCTTAACACTTAAACCACCACTTGATTCCTTAGACTCAGGAAATAA 1680	CACTGGATATAAACCCAAATTTCAAATTTTCTGCCTGAGGGAAGGCCATCTGAGCAATAA 1620	AGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTCAA 1560	CATICCCAGAACACAGCCTACAGACTACAAGAAGAAGAATACAGAACCCCTGGAGACAAA 1500		TARINI CONTROL CONTROL TO CONTROL CONT		CGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTCCG 1260 AACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATTCC 1320

3 to Q . !	PRIOR APPLICATION UNIMER: U.S. 60/453,672 PRIOR FILING DATE: 2003-03-10 NUMBER OF SEQ ID NOS: 11 SOPTWARE: Patentin version 3.2 SEQ ID NO 5 LENGTH: 2859 TYPE: DNA ORGANISM: Homo sapiens PEATURE: NAME/KEY: CDS LOCATION: (119)(2005) PEATURE: NAME/KEY: CDS PEATURE: NAME/KEY: CDS PEATURE: NAME/KEY: CDS	OHOIO	Qy 2761 TTGAACCAGGAAGGCAGAGGTTGCACTGAGACTTGTGCCACTGCACTCCAGCCTGG 2820 L 111111111111111111111111111111111111	Db 2581 TGCTTGTAATCCCAGCACTTTGTAGGCTGAGGTGGGTGGAGTCAGGAGTT 2640 Qy 2641 CGAGTCCAGCCCAGCAATATGCTGAAAACCCTGTCTACTAAAATTACAAAAAATTAGCC 2700	Oy 2341 GGTCCCGAAGGTGGAACATGCTTCATGGTCACACATACAGGCACAAAAACAGCATTATGT 2400 Db 2341 GGTCCCGAAGGTGGAACATGCTTCATGGTCACACATACAGGCACAAAAACAGCATTATGT 2400 Qy 2401 GGACGCCTCATGTATTTTTATAGAGTCAACTATTCCTCTTTATTTCCCTCATTGAAA 2460
Db 961 ATTCTACTTGGAGCCAACATTAAGTACTACTTCTGGAGATTCTACTTGGGAATCATT 1200 Qy 1021 AAGGTACTGGAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTCCCCA 1080	OY	601 TGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAACAT 661 CTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTTGGGTCCAAGCAAG	QY 481 IGGALATIC GUCAGATATIC CITATISANG TANCETGI TO THAT IN THE ANGLAN SAVO AND THE ANGLAN SAVO AN	361 TAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTACTG	Qy 61 GGAATTATGTGCTTCAAACAGGTTGAAAGAGGGAAACAGTCTTTTCCTGCTTCCAGACAT 120 61 GGAATTATGTGCTTCAAACAGGTTGAAAGAGGGAAACAGTCTTTTCCTGCTTCCAGACAT 120 61 GGAATTATGTGCTTCAAACAGGTTGAAAGAGGGAAACAGTCTTTTCCTGCTTCCAGACAT 120 Qy 121 GAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTCTCAGCTGGTG 180 121 GAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACCTCTCTCAGCTGGTG 180 Qy 181 TCATGGAGGAATTACAAATATAAAACTGCTCTTGGCCACATCTGGGTAGAACCAGCCACAT 240

ક

```
1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1141
                                                                                                                                                                                                                                                                                                1921
                                                                                                                                                                                                                                                                                                                                                          1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1201
                                                                                                                                                                                                                                   1981
                                                                                                                                                                                                                                                                  1981
                                                                                                                                                                                                                                                                                                                                                                                         1861
                                                                                                                                                                                                                                                                                                                                                                                                                       1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1321
TGTTTCCAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAG
                                            ATACCTAGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTTCTACCAATCT
                                                                 ATACCTAGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTTCTACCAATCT
                                                                                                                             AAAAAATGTATTCACATACAAATCTTCACATGGACACGTGTTTTCATTTCCCTTGGATAA
                                                                                                                                                                                        GCCTTGCAATCTGAACTTGGGTTTTTCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTTGA
                                                                                                                                                                                                                                   CAATAGGATTTCACTCTTGGAAAAGTAGAGCTGTGTGGTCAAAATCAATATGAGAAAGCT
                                                                                                                                                                                                                                                   CAATAGGATTTCACTCTTGGAAAAGTAGAGCTGTGTGGTCAAAATCAATATGAGAAAGCT
                                                                                                                                                                                                                                                                                                GAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCACTT
                                                                                                                                                                                                                                                                                                                GAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTTGGAAAGCCACTT
                                                                                                                                                                                                                                                                                                                                                             TGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTTGGGGATCGT
                                                                                                                                                                                                                                                                                                                                                                             TGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTTGTCTCCTGTTTTGGGGGATCGT
                                                                                                                                                                                                                                                                                                                                                                                                                         TGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                          TGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAACACAATATTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCCAGGITACAAAAGCATCCTAAITTTGCTTTTTCTGTTTCAAGTGTGAATTCACTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGTGTGAATTCACTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACTGGATATAAACCCCAAATTTCAAATTTTTCTGCCTGAGGGAAGCCATCTCAGCAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGGAGTACAGGACCCCTGGAGACAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAATTCCAGTGAGCAGGTCCTATATGTTGATCCCCATGATTACAGAGATAAAAGAAATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTTAACAGATCATTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGTCTTTGCTGTTATGTTGTCAATTCTTTTCTTTTGATTGGGATATTTAACAGATCATTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCCTTGCAATCTGAACTTGGGTTTTCCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACTGGATATAAACCCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTCAA
                                                                             2220
                                                                                                                                         2160
                                                                                                                                                                                                     2100
                                                                                                                                                                                                                                   2040
                                                                                                                                                                                                                                                                                                                               1980
                                                                                                                                                                                                                                                                                                                                                             1920
                                                                                                                                                                                                                                                                                                                                                                                                                       1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1200
                   2280
                                                 2220
                                                                                                             2160
                                                                                                                                                                          2100
                                                                                                                                                                                                                                                                  2040
                                                                                                                                                                                                                                                                                                1980
                                                                                                                                                                                                                                                                                                                                                                                          1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                 ; LOCATION: (
US-10-720-026-1
                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 3
US-10-720-026-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2221
```

8

음 성

음 중 음

8 8 8 8 8 8 8 8 8

망

8 8 8 8 8 8 8 8 8 8 8 8 8

रु है है

밁

100.0%;

Score

2857.4;

DB 9;

Length

```
Sequence 1, Application US/10720026
; Sequence 1, Application No. US20040258686A1
; Publication No. US20040258686A1
; GENERAL INFORMATION:
; APPLICANT: Chirica, Madaline
; APPLICANT: Patham, Christi L.
APPLICANT: Mastelein, Robert A.
APPLICANT: Moore, Kevin W.
; TITLE OF INVENTION. Mammalian Receptor Proteins; Related Reagents and Methods.
; FILE REFERENCE: DX01074B1K
; CURRENT APPLICATION NUMBER: US/10/720,026
; CURRENT FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: 60/203,426
PRIOR FILING DATE: 2000-05-10
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 1
; LENTH: 2859
                                                                 LENGTH: 2859
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (119)..(2005)
FEATURE:
NAME/KEY: mat_peptide
LOCATION: (188)...(2005)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGAGTCCAGCCTGGCCAATATGCTGAAACCCTGTCTCTACTAAAATTACAAAAATTAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAATAAATGCTGAAAATTTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATGCAAAACAGCTCTCTATTGTGTACAGAAAGGGTAAATAATGCAAAATACCTGGTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATGCAAAACAGCTCTCTATTGTGTACAGAAAGGGTAAATAATGCAAAATACCTGGTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACGCCTCATGTATTTTTATAGAGTCAACTATTTCCTCTTTATTTTCCCTCATTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGACGCCTCATGTATTTTTATAGAGTCAACTATTTCCTCTTTATTTTCCCTCATTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTCCCGAAGGTGGAACATGCTTCATGGTCACACATACAGGCACAAAAACAGCATTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTCCCGAAGGTGGAACATGCTTCATGGTCACACATACAGGCACAAAAAACAGCATTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TIGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCCATGGTGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTTRGGTGGATCACCTGAGGTCAGGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTTTCCAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCCGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGAGTCCAGCCTGGCCAATATGCTGAAAACCCTGTCTCTACTAAAAATTACAAAAATTAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2400
```

ð	B 8	P Q	Db Qq	d d	B &	D Q	B 8	DĢ. QV	Db Qy	QQ QQ	Db Qy	B 8	do Vo	Qy db	B &	B 8	₽ &	Best Match
1021 AAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCA 1080	961 ATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAA 1020 	901 AAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGA 960 	841 TTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACAAC 900 	781 TGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATTTA 840	721 ACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCTTC 780	661 CTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAACGC 720	601 TGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAACAT 660 	541 CATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTACA 600	481 TGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGCAA 540	421 CACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCTTC 480	361 TAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTACTG 420 	301 AAGGAAACTTCATTTTTATAAAAATGGCATCAAAGAAAGA	241 TTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAACC 300	181 TCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACAAT 240	121 GAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGGTG 180	61 GGAATTATGTGCTTCAAACAGGTTGAAAGAGGGAAACAGTCTTTTCCTGCTTCCAGACAT 120 	1 GIGGTACGGGAATICCATIGTIGGCAGCCAACAAGGGIGGCAGCCIGGCICGAAGT 60 1 GIGGTACGGGAATICCATIGTGTIGGGCAGCCAACAAGGGTGGCAGCCTGACCTGA	Similarity 100.0%; Pred. No. 0; 9; Conservative 0; Mismatches 0; Indels 0; Gaps
	B 8	2 8 4	S B 8	} ₽ &	₽ \$?	дь Q	P 5	}	?) P Q	B &	? B S	P &	S B 1	Q B	Q B	
2101 AAAAAATGTATTCACATACAAATCTTCACATGACACACGTTTTCATTTCCCTTGGATAA 2160 2101 AAAAAATGTATTCACATACAAATCTTCACATGGACACATGTTTTCATTTCCCTTGGATAA 2160 2101 AAAAAATGTATTCACATACAAATCTTCACATGGACACATGTTTTCATTTCCCTTGGATAA 2160	2041 GCCTTGCAATCTGAACTTGGGTTTTCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGA 21	1981 CACATAGGATTTCACTCTTTGGAAAAGTAGAGCTGTTGTGGTCAAAATCAATATGAGAAAGCT	1921	1861 TGAAACTATTCCAGAACAGGCCTTGCTTGTGATGAATTTGTCTCCTGTTTGGGAATCGT	1801 TGACATACAAAACTCAGTAGAAGAAACCACCATGCTTTTGGAAAATGATTCACCCAG	1741 CAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCTCC 1741 CAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCTCCC 1741 CAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCTCCC	1681 TCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGTGTGAAATTCACTAAG	1621 TAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAATAA	1501 CACIGGAIAIMANCECCHAMAIICICHAMAIIICICHAMAICH CACAAANAA (CACAAANAA 11CANAAA 11CANAAAA 11CANAAAA 11CANAAAA 11CANAAAA 11CANAAAA 11CANAAAA 11CANAAAA 11CANAAAA 11CANAAAA 11CANAAAAA 11CANAAAA 11CANAAAA 11CANAAAAA 11CANAAAA 11CANAAAAAAAAAA	1501 AGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTCAA 1	1441 CATCCCAGAACACAACACCTACAGACTACAGAGGAGAATACAGGACCCCTGGAGACACAACAC 1441 CATCCCAGAACACCACACACCCTGGAGACCACAACACACAC	1381 TAATTCCAGTGAGCAGGTCCTATATGTTGATCCATGATTACAGAGATAAAAGAAATCTT 1	1321 IARIAIGHAMARACHACAMIGIIG ISMAMAIGH IACAGAMARIAGIGARCIIAISMAIAN	1201 ANCISSEM I ANCHONOS CITATISI INTERCCAMBISSE I MISTARIA COMPANIA I CONTROL DE LA COMPANIA I CONTROL DE LA CONTROL DEL LA CONTROL DE LA CONTROL DEL CONTR	1261 ACCOCCATO A ACCA ACCA ACCATOTT ATTROCTOR A ACCACATOCT TO ACCACATO A ACCA	1141 1201	1081 1141	1021

```
Sequence 1, Application US/10667289

Publication No. US20050100917A1

GENERAL INFORMATION:
APPLICANT: Chirica, Madaline
APPLICANT: Parham, Christi L.
APPLICANT: Moore, Kevin W.
APPLICANT: Moore, Kevin W.
APPLICANT: Moore, Kevin W.
APPLICANT: Moore, Kevin W.
CURRENT FILING DATE: 2003-09-18
PRIOR APPLICATION NUMBER: US/10/667,289

CURRENT FILING DATE: 2003-09-18
PRIOR APPLICATION NUMBER: US/09/853,180
PRIOR FILING DATE: 2000-05-10
PRIOR FILING DATE: 2000-05-10

NUMBER OF SEQ ID NOS: 4
SOFTWARE: Patentin version 3.2
SEQ ID NO 1
LENGTH: 2859
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                             RESULT 4
US-10-667-289-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       음 성 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ર્ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ई
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2521
                                                                                                                                                                                                                                                                                                                                                                                                                                               TTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGAGTCCAGCCTGGCCAATATGCTGAAAACCCCTGTCTCTACTAAAATTTACAAAAATTAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATGCAAAACAGCTCTCTATTGTGTACAGAAAGGGTAAATAATGCAAAATACCTGGTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATGCAAAACAGCTCTCTATTGTGTACAGAAAGGGTAAATAATGCAAAATACCTGGTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGACGCCTCATGTATTTTTTATAGAGTCAACTATTTCCTCTTTATTTTCCCTCATTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGTCCCGAAGGTGGAACATGCTTCATGGTCACACATACAGGCACAAAAAACAGCATTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGTTTCCAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATACCTAGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTTCTACCAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATACCTAGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTTCAGTTCTACCAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                               GCAACAAGAGCAAAACTCTGTCTGGAAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCCATGGTGGCAGGTGCTTGTAATCCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGAGTCCAGCCTGGCCAATATGCTGAAACCCCTGTCTCTACTAAAATTACAAAAATTAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGACGCCTCATGTATTTTTTATAGAGTCAACTATTTCCTCTTTATTTTCCCTCATTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTCCCGAAGGTGGAACATGCTTCATGGTCACACATACAGGCACAAAAACAGCATTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTTTCCAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2220
```

```
밁
                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
NAME/KEY: misc feature
LOCATION: (563)..(563)
OTHER INFORMATION: r means g or a.
OTHER INFORMATION: originally filed.
US-10-667-289-1
             ঠ
                                          밁
                                                             ঠ
                                                                                         밁
                                                                                                           S
                                                                                                                                      밁
                                                                                                                                                         Ş
                                                                                                                                                                                   밁
                                                                                                                                                                                                      र्
                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY:
LOCATION:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
NAME/KEY: mat peptide
LOCATION: (188)..(2005)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc_feature
LOCATION: (127)...(127)
OTHER INFORMATION: k means g c
OTHER INFORMATION: originally
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            atch 100.0%; Score 2857.4; cal Similarity 100.0%; Pred. No. 0; 2859; Conservative 0; Mismatches
                                           661
                                                                                                                                       541
                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                           241
721
                   721
                                                                 661
                                                                                          601
                                                                                                                109
                                                                                                                                                                                     481
                                                                                                                                                                                                           481
                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GTGGTACGGGAATTCCATTGTGTTGGGCAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGAATTATGTGCTTCAAACAGGTTGAAAGAGGGAAACAGTCTTTTCCTGCTTCCAGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGGTACGGGAATTCCATTGTGTTGGGCAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGT
                                                         CTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGGTTTTGGGTCCAAGCAGCAAACGC
                                                                                                                                       TGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGCAA
                                                                                                                                                                                                                                                                                               TAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTACTG
                                                                                                                                                                                                                                                                                                                             TTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAGCAATTAAGAACTGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                       TCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCCTTTACATACTCTTCAGCTGGTG
               ACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCTTC
                                                                                                      TGTGAAGAGTTTAGAGACAGAAGAAGAAGAAGCAACAGTATCTCACCTCAAGCTATATTAACAT
                                                                                                                                                                                     TGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGCAA
                                                                                                                                                                                                                                  CACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAAGACATTTCTTC
                                                                                                                                                                                                                                               CACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCTTC
                                                                                                                                                                                                                                                                                 TAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                         TCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDS
(119)..(2005)
                                                                                          TGTGAAGAGTTTAGAGACAGAAGAAGAAGCAACAGTATCTCACCTCAAGCTATATTAACAT
                                                                                                                                                                                                                                                                                                                                                                            TTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   or t/u.
y filed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              page 12, line
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    line
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    36,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ç,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                O
Ha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    patent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              patent application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    application
                     780
                                                                   720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                      360
 780
                                              720
                                                                                           660
                                                                                                                  660
                                                                                                                                         600
                                                                                                                                                               600
                                                                                                                                                                                       540
                                                                                                                                                                                                            540
                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                63
```

٠,

781 781

CACTGGATATAACCCCAAATTTCAAATTTTCTGCCTGAGGAAGCCATCTCAGCAATAA 1620	TAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAAATCTT CATCCCAGAACACAAGCCTACAGACTACAAGAAGAAATACAGGACCCCTGGAGACAAG [1 AACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATTCC 1320	31 GGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTTCAT 1140 11 CTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGGACTTTAATTGGGAATGAT 1200 11	ATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGTACCCA 1 AAGGTACTGGCGAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCA 1 AAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCA 1 AAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCA 1 AAGGTACTGGCAGCCTTGGAGGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCA 1 GGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCCAT 1	TGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATTTA
5 8 8 8 8 8	Q	Q	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	B Q B Q B	Q
641 CGAGTCCAGCCTGGCCAATATGCTGAAACCCTGTCTCTACTAAAATTAGAAAAATTAGCC 701 GGCCATGGTGGCAGGTGCTTGTAATCCCAGCCTGCTTACTAAAATTAGAAAAATTAGCC 701 GGCCATGGTGGCAGGTGCTTGTAATCCCAGCCTACTTAGGAAGCCTGAGGCAGAGAAAATTAGCC 701 GGCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAAAATCAC 701 GGCCATGGTGCAAGGCAGAGGTTGCACTGAGCTAGAGTTGTGCCACTCCAGCCTGG 761 TTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGG 761 TTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGG 821 GCAACAAGAGCAAAACTCTGTTCTGGAAAAAAAAAAAAA	2461 GATGCAAAACAGCTCTCTATTGTGTACAGAAAGGGTAAATAGTGCAAAATACCTGGTAGT 2520 2521 AAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAAGGCGTGGTGGCTCA 2580	341 GGICCCGAAGGIGGAACAIGCTICAIGGICACAIACAGCACAAAAACAGCAITAIGE 24 341 GGTCCCGAAGGIGGAACAIGCTTCATGGICACACAIACAGCACAAAAACAGCATTATGT 24 401 GGACGCCTCATGTATTTTTTATAGAGTCAACTATTTCCTCTTTATTTTCCCTCATTGAAA 24 401 GGACGCCTCATGTATTTTTTATAGAGTCAACTATTTCCTCTTTATTTTCCCTCATTGAAA 24 401 GGACGCCTCATGTATTTTTTATAGAGTCAACTATTTCCCTCTTTATTTTCCCTCATTGAAA 24 401 GGACGCCTCATGTATTTTTTATAGAGTCAACTATTTCCTCTTTTATTTCCCTCATTGAAA 24	TGTTTCCAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCCGGGAG	2041 GCCTTGCAATCTGAACTTGGGTTTTCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGA 2100 2101 AAAAAATGTATTCACCATACAAATCTTCACCATGGACACATGTTTTCACTTTGCCTTTGGATAA 2160	1861 TGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATCGT 1920

1261

1261

1201 1201 1081 1081 1021

1021

961 901 901

1381

1381 1321

RESULT 5
US-10-667-290-1
; Sequence 1, Application US/10667290
; Publication No. US20050100918A1

1681

1801

TGACATACAAAACTCAGTAGAGGAAGGAAACCACCATGCTTTTGGAAAATGATTCACCCAG

1860 1800

1860

1801

1561

1561

```
GENERAL INFORMATION:

APPLICANT: Chirica, Madaline
APPLICANT: Parham, Christi L.
APPLICANT: Parham, Christi L.
APPLICANT: Rastelein, Robert A.
APPLICANT: Magnelein, Robert A.
APPLICANT: Moore, Kevin W.
TITLE OF INVENTION: Mammalian Receptor Proteins; Related Reagents and Methods.
FILE REFERENCE: DX01074
CURRENT APPLICATION NUMBER: US/09/667,290
CURRENT FILING DATE: 2003-09-18
PRIOR APPLICATION NUMBER: US/09/853,180B
PRIOR APPLICATION NUMBER: US/09/853,180B
PRIOR APPLICATION NUMBER: 60/203,426
PRIOR FILING DATE: 2001-05-10
NUMBER OF SEQ ID NOS: 4
SOFTWARE: Patentin version 3.2
SEQ ID NO 1
LENGTH: 2859
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (119)..(2005)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (563)..(563)
; OTHER INFORMATION: r means g or a.
; OTHER INFORMATION: originally filed.
US-10-667-290-1
                                                              밁
                                                                                      8
                                                                                                                   밁
                                                                                                                                      S
                                                                                                                                                                 8
                                                                                                                                                                                              8
                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                       र्
                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                        ৪
                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                              र्
                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 2859; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
NAME/KEY: misc feature
LOCATION: (127)...(127)
OTHER INFORMATION: k means g o
OTHER INFORMATION: originally
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
NAME/KEY: mat_peptide
LOCATION: (188)..(2005)
               421
                                        421
                                                                 361
                                                                                           361
                                                                                                                      301
                                                                                                                                             301
                                                                                                                                                                         241
                                                                                                                                                                                                  241
                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                    13
                                                                                                                                                                                                                                                                                                                                                             61
                           CACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCTTC
                                                                  TAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTACTG
                                                                                TAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTACTG
                                                                                                                                     TCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACAAT
                                                                                                                                                                                                                                                                                              GAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGGTG
                                                                                                                                                                                                                                                                                                                                                 GGAATTATGTGCTTCAAACAGGTTGAAAGAGGGGAAACAGTCTTTTCCTGCTTCCAGACAT
                                                                                                                                                                                                                                                                                                                                                                                                      GTGGTACGGGAATTCCATTGTGTTGGGCAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGT
               CACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCTTC
                                                                                                                      AAGGAAACTTCATTTTTATAAAATGGCATCAAAGAAAGATTTCAAATCACAAGGATTAA
                                                                                                                                                                                                                                                                                                                                   GGAATTATGTGCTTCAAACAGGTTGAAAGAGGGAAAACAGTCTTTTCCTGCTTCCAGACAT
                                                                                                                                                                                                                                                                                                                                                                                         GTGGTACGGGAATTCCATTGTGTTGGGCAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 2857.4; ilarity 100.0%; Pred. No. 0; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   y or t/u.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         See page 12, line
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                page 12,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 line
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         36, of patent application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   34,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of patent application
                                                                                                                                                                                                                                                                                                                                                                                                                                        ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2859;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                               360
                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                         60
               480
                                        480
                                                                 420
                                                                                           420
                                                                                                                      360
                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          86
                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
ঠ
                        맑
                                             Ś
                                                                             밁
                                                                                                  ঠ
                                                                                                                                  밁
                                                                                                                                                       8
                                                                                                                                                                                    밁
                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                   1381
                                                                                                                                                                                       1321
                                                                                                                                                                                                                                          1261
                                                                                                                                                                                                                                                                                               1201
                                                                                                                                                                                                                                                                                                                                                 1141
                                                                                                                                                                                                                                                                                                                                                                           1141
                                                                                                                                                                                                                                                                                                                                                                                                      1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1021
                                                                               1441
                                                                                                         1441
                                                                                                                                                            1381
                                                                                                                                                                                                                                                                   1261
                                                                                                                                                                                                                                                                                                                                                                                                                               1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCCTGGAGACAAG
                                                                                                                                                     TAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATCTT
                                                                                                                                                                                     TAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAATAA 1380
                                                                                                                                                                                                                                                        AACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATTCC 1320
                                                                                                                                                                                                                                                                                                           CGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTCCG
                                                                                                                                                                                                                                                                                                                                                                CTCTACAGGGCACCTTACTTCTGACAACAGAGAGAGACATTGGACTTTTATTGGGAATGAT 1200
                                                                                                                                                                                                                                                                                                                                                                                                       GGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCCAT 1140
                                                                                                                                                                                                                                                                                                                                                                                                                    GGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCCAT 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCCA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAA 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGGGATAGTCAAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTGAAGAGTTTAGAGACAGAAGAAGAAGCAACAGTATCTCACCTCAAGCTATATTAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTACA
                                                                                                                                  TAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATCTT
                                                                                                                                                                                                                                         AACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATTCC
                                                                                                                                                                                                                                                                                              CGTCTTTGCTGTTATGTTGTCAATTCTTTTGTTTGATTTGGGATATTTAACAGATCATTCCG
                                                                                                                                                                                                                                                                                                                                                  CTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAAACAGTTCCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAACAT
 CACTGGATATAAACCCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAATAA 1620
                           AGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTCAA
                                         AGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTTCCTGATCTCAA
                                                                                CATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1080
                                                                                                                                                                                                                                                                                                1260
                                                                                                                                                                                                                                                                                                                           1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    840
                                                       1560
                                                                                 1500
                                                                                                          1500
                                                                                                                                     1440
                                                                                                                                                               1440
                                                                                                                                                                                                                                             1320
                                                                                                                                                                                                                                                                                                                                                    1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                              1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    600
```

```
2161
                                                                                                                                                                                                                                                                                                                                             2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1801
                                                                                                                                                                                                                                                                                                                           2161
                                                                                                                                                                                                                                                                                                                                                                                                                           1981
                                                                                                                                                                                                                                                                                                                                                                                                                                             1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1861
AAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCA
                                                                                                                 GATGCAAAACAGCTCTCTATTGTGTACAGAAAGGGTAAATAATGCAAAATACCTGGTAGT
                                                                                                                                             GGTCCCGAAGGTGGAACATGCTTCATGGTCACACATACAGGCACAAAAACAGCATTATGT
                                                                                                                                                                                                                           CTCCATGCCTTTTTAATTTTAGCCATTCTTCTGCCTMATTTCTTAAAATTAGAGAATTAA
                                                                                                                                                                                                                                    CTCCATGCCTTTTTAATTTTAGCCATTCTTCTGCCTMATTTCTTAAAATTAGAGAATTAA
                                                                                                                                                                                                                                                                 TGTTTCCAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAG
                                                                                                                                                                                                                                                                                                       ATACCTAGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTTCTACCAATCT
                                                                                                                                                                                                                                                                                                                   ATACCTAGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTTCTACCAATCT
                                                                                                                                                                                                                                                                                                                                             GCCTTGCAATCTGAACTTGGGTTTTCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                         CAATAGGATTTCACTCTTGGAAAAGTAGAGCTGTGTGGTCAAAATCAATATGAGAAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGACATACAAAACTCAGTAGAGGAGGAAACCCACCATGCTTTTGGAAAAATGATTCACCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGTGTGAATTCACTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCCAG
                                               2640
                                                                   2580
                                                                                    2580
                                                                                                         2520
                                                                                                                                                                2460
                                                                                                                                                                                                       2400
                                                                                                                                                                                                                           2340
                                                                                                                                                                                                                                             2340
                                                                                                                                                                                                                                                                  2280
                                                                                                                                                                                                                                                                                                       2220
                                                                                                                                                                                                                                                                                                                                                                2160
                                                                                                                                                                                                                                                                                                                                                                                    2100
                                                                                                                                                                                                                                                                                                                                                                                                      2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1620
           2700
                             2640
                                                                                                                                                                                     2400
                                                                                                                                                                                                                                                                                                                                                                                                                           2040
                                                                                                                                                                                                                                                                                                                                                                                                                                              2040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1740
                                                                                                                                                                                                                                                                                                                                               2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1860
                                     밁
                                                      ð
                                                                                         Ś
                                                                                                                                                                       5
                                                                                                                                                                                             밁
                                                                                                                                                                                                                                  멼
                                                                                                                                                                                                                                                   ş
              S
                                                                           밁
                                                                                                                 문
                                                                                                                               ક
                                                                                                                                                      뭐
                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2641
                                                                           316
                                                                                                                                                         196
  436
                  448
                                                          388
                                                                                              328
                                                                                                                  256
                                                                                                                                    268
                                                                                                                                                                           208
                                                                                                                                                                                             136
                                                                                                                                                                                                                 148
                                                                                                                                                                                                                                    76
                                                                                                                                                                                                                                                       88
                                                                                                                                                                                                                                                                           16
```

중 음 중 음

밁

8 8 8

음 성 음

8 8 8 8

8 8 8 8 8

음 성

음 성

음 성 음 성 음

8 8 8 8 8

```
APPLICANT: Immunex Corporation
APPLICANT: Cosman, David J.
APPLICANT: Mosley, Bruce A.
APPLICANT: Mosley, Bruce A.
APPLICANT: Bird, Timothy A.
APPLICANT: Bird, Timothy A.
APPLICANT: Bird, Timothy A.
APPLICANT: DuBose, Robert F.
APPLICANT: Miley, Steven R.
ITILE OF INVENTION: HEMATOPOISTIN RECEPTORS HPR1 AND HPR2
FILE REFERENCE: 3160-B
CURRENT APPLICATION NUMBER: US/09/972,708
CURRENT FILING DATE: 2001-10-05
NUMBER OF SEQ ID NOS: 29
SOFTWARE: Patentin version 3.1
SEQ ID NO 19
LENGTH: 2830
TYPE: DNA
ORGANISM: Homo sapiens
US-09-972-708-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 2809; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 19, Application US/09972708 Publication No. US20030059871A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28 CAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGTGGAATTATGTGCTTCAAACAGGTTGAA
                                                                         AAACTITCTGGAACCACATGCTTCTATGTACTGCACTGCTGAATGTCCCAAACATTTTCA
                                                                                                                                                        CTCTGGCCACATCTGGGTAGAACCAGCCACAATTTTTAAGATGGGTATGAATATCTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                AGTAATAGCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATATAAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGAGGGAAACAGTCTTTTCCTGCTTCCAGACATGAATCAKGTCACTATTCAATGGGATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGTGGAATTATGTGCTTCAAACAGGTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCAC
                   AGAGACACTGATATGTGGAAAAAGACATTTCTTCTTGGATATTCCGCCAGATATTCCTGATGA
                                                                                                                                                                                                                                                                                                                         CTCTGGCCACATCTGGGTAGAACCAGCCACAATTTTTAAGATGGGTATGAATATCTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                           AGTAATAGCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATATAAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGAGTCCAGCCTGGCCAATATGCTGAAACCCTGTCTCTACTAAAATTACAAAAATTAGCC
AGAGACACTGATATGTGGAAAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98.3%; Score 2810.2;
99.8%; Pred. No. 0;
7ative 4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    w
T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                             195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2760
495
                                                                             435
                                                                                                                    447
                                                                                                                                                            375
                                                                                                                                                                                                   387
                                                                                                                                                                                                                                            315
                                                                                                                                                                                                                                                                                                                                                                    267
                                                                                                                                                                                                                                                                                                                                                                                                                                                      207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
```

SOR MATTACCTOTOTCATTTATOANTATTCOGCCACATTCATCCTCCACATTCCTCCAATTCCTCCAATTCCTCC
<u> </u>
5 8
158 TITTTOCCTOMOGRAMOCONTTOMOGRATIANTAMATINATTOCTTOMOCOTTAM 1647 1576 TITTTOCCTOMOGRAMOCONTTOMOCOTTAMATINATIONATTOCTTOMOCOTTAM 1653 1564 ACCACCOGRITANTICTTOMOCOTTOMOCOTTAMATINATIONATIONATIONATIONATIONATIONATIONA

음 중 음

Qy 328 CATCAAAGAATTCAAATCACAAGGATTAATAAACAACAGCTCGGCTTTGGTATAA 387	136 AGTAATAĞCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATTATAAAACTG 195	Qy 28 CAGCCAACAAGGGTGGCAGCCTGGAAGTGGAATTATGTGCTTCAAACAGGTTGAA 87 28 CAGCCAACAAGGGTGGCAGCCTGGCTGCAAGTGGAATTATGTGCTTCAAACAGGTTGAA 87 29 16 CAGCCAACAAGGGTGGCAGCCTGCTCTGAAGTGGAATTATGTGCTTCAAACAGGTTGAA 75 29 88 AGAGGGAAACAGTCTTTTCCTGCTTCCAGACATGAATCAKGTCACTATTCAATGGGATGC 147 20 20 21 21 21 21 21 21 21 21 21 21 21 21 21	Homo sapiens -19 98.3%; Score 2810.2; DB 8; Length 2830; Similarity 99.8%; Pred. No. 0; Similarity 99.8%; Pred. No. 0; Gaps	APPLICANT: Bird, Timothy A. APPLICANT: DuBose, Robert F. APPLICANT: Wiley, Steven R. ITITLE OF INVENTION: HEMATOPOIETIN RECEPTORS HPR1 AND HPR2 FILE REFERENCE: 3160-B CURRENT APPLICATION NUMBER: US/10/715,667 CURRENT FILING DATE: 2003-11-14 PRIOR APPLICATION NUMBER: US/09/972,708 PRIOR FILING DATE: 2001-10-05 NUMBER OF SEQ ID NOS: 29 SOFTWARE: Patentin version 3.1 SEQ ID NO 19	-19 , Applic No. US2 ORMATION Immunex Cosman Mosley	Db 2656 ACCCTGTCTCTACTAAAATTACAAAAATTAGCCGGCCATGGTGGCAGGTGCTTGTAATCC 2715 Qy 2728 CAGCTACTTGGGAGGCTGAGGCAGGAAGAACCACTGTAAACCAGGAAGCAAGGCAGGAGGTTGCACT 2787 [
1396 TGATCCCATGATACAGAGATAAAGAAATTACTTCCTTAACACTTAA	1288 GTTAATACCAAAGTGGCTTTATGAAGATATTCCTAATATGAAAAACAGCAATGTTGTGAA	Db 1096 CACATGGAATTCTGGGCTAACAGTTGCTTCATCTACAGGGCACCTTACTTCTGACAA 1155 Qy 1168 CAGAGGAGACATTCGGACTTTAATTGGGAATGATCGTCTTTAGTGTGTTATGTTGTCAATTCT 1227	OY 988 CGTATTICAAGTGAGATCTCAAGAAACAGGTAACAGGTAACAGGTAACAGGTACTCTACAGTTCACC 104/	TRIANATGCTACAGTGCCCAAGACCATAATTTATTGGGATAGTCAAACAACAACTCAAGACTACAAGACCATAATTTATTGGGATAGTCAAACAACAACTCAAGACTAAATTCAAACAATTCAAACAATTCAAGACAATTCAAACAATTCAAAAAAAA	688 GAAGTACTTGGTTTGGGTCCAAGCAGCAGCACTAGGCATGGAAGAGTCAAAACAACT	Oy 508 AGTAACCTGTGTCATTTATGAATATTCAGGCAACATGACTTGCACCTGGAATGCTRGGAA 567

2775

```
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     D
               ð
                                           B
                                                                  S
                                                                                                   밁
                                                                                                                      र्
                                                                                                                                                 문
                                                                                                                                                                               8
                                                                                                                                                                                                                   음 중
                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                         음 중
                                                                                                                                                                                                                                                                                                                                                                                    음 5
                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            음 성 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1696
                                                                                                                                                                                                                                                                                                         2368
                                                                                                                                                                                                                                                                                                                                     2296
                                                                                                                                                                                                                                                                                                                                                                                                                                                      2176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1828
                                                                                                                                                                                                                                       CAACTATTTCCTCTTTATTTTCCCTCATTGAAAGATGCAAAACAGCTCTCTATTGTGTAC
                                                                                                                                                                                                                                                                           GTCACACATACAGGCACAAAAACAGCATTATGTGGACGCCTCATGTATTTTTATAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TATGATAAGCATATGTTTCAGTTCTACCAATCTTGTTTCCAGAGTAGTGACATTTCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGCTGTGTGTGCAAAATCAATATGAGAAAGCTGCCTTGCAATCTGAACTTGGGTTTTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCTGATGAATTTGTCTCCTGTTTGGGGATCGTGAATGAGGAGTTGCCATCTATTAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCTGATGAATTTGTCTCCTGTTTGGGGATCGTGAATGAGGAGTTGCCATCTATTAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AACCACCATGCTTTTGGAAAATGATTCACCCAGTGAAACTATTCCAGAACAGACCCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTCATATTAAATCAAGGAGAATGCAGTTCTCCTGACATACAAAACTCAGTAGAGGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTCATATTAAATCAAGGAGAATGCAGTTCTCCTGACATACAAAACTCAGTAGAGGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGCTTTTTCTGTTTCAAGTGTGAATTCACTAAGCAACACAATATTTCTTGGAGAATTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCACCAGTTGATTCCTTAGACTCAGGAAATAATCCCAGGTTACAAAAGCATCCTAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGAGGTRGGTGGATCACCTGAGGTCAGGAGTTCGAGTTCCAGCCTGGCCAATATGCTGAA
                                                                                                                  AAATAGAATCATTAGGCCAGGCGTGGTGGCTCATGCTTGTAATCCCCAGCACTTTGGTAGG
                                                                                                                                                                              CAACTATTTCCTCTTTATTTTCCCTCATTGAAAGATGCAAAACAGCTCTCTATTGTGTAC
                                                                                                                                                                                                                                                                                                                                    CTTCTGCCTCATTTCTTAAAATTAGAGAATTAAGGTCCCGAAGGTGGAACATGCTTCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGCAATAGAAATTGAATTCTGCCTCTTTTTGAAAAAAATGTATTCACATACAAATCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGCTGTGTGGTCAAAATCAATATGAGAAAGCTGCCTTGCAATCTGAACTTGGGTTTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTATTTTCCACAAAATATTTTGGAAAGCCACTTCAATAGGATTTCACTCTTGGAAAAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTATTTTCCACAAAATATTTTGGAAAGCCACTTCAATAGGATTTCACTCTTGGAAAAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACCACCATGCTTTTGGAAAATGATTCACCCAGTGAAACTATTCCAGAACAGACCCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCACCAGTTGATTCCTTAGACTCAGGAAATAATCCCAGGTTACAAAAGCATCCTAATTT
 ACCCTGTCTCTACTAAAATTACAAAAATTAGCCGGCCATGGTGGCAGGTGCTTGTAATCC
                                                                                                                                                            CTTCTGCCTMATTTCTTAAAATTAGAGAATTAAGGTCCCGAAGGTGGAACATGCTTCATG
                                                                                                                                                                                                                                                                                                                                                                                             CTCCTACCATCACCATGTAAGAATTCCCCGGGAGCTCCATGCCTTTTTAATTTTAGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                         CTCCTACCATCACCATGTAAGAATTCCCGGGAGCTCCATGCCTTTTTAATTTTAGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                      TATGATAAGCATATGTTTCAGTTCTACCAATCTTGTTTCCAGAGTAGTGACATTTCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGCAATAGAAATTGAATTCTGCCTCTTTTTGAAAAAAATGTATTCACATACAAATCTTC
                                                                                                      AAATAGAATCATTAGGCCAGGCGTGGTGGCTCATGCTTGTAATCCCAGCACTTTGGTAGG
                                                                         2667
                                                                                                                                                                                          2547
                                                                                                                                                                                                                                                                                                                                                                                                                         2307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1635
                                                                                                                                 2607
                                                                                                                                                             2535
                                                                                                                                                                                                                        2475
                                                                                                                                                                                                                                                 2487
                                                                                                                                                                                                                                                                            2415
                                                                                                                                                                                                                                                                                                         2427
                                                                                                                                                                                                                                                                                                                                                                2367
                                                                                                                                                                                                                                                                                                                                                                                              2295
                                                                                                                                                                                                                                                                                                                                                                                                                                                      2235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1755
                                              2655
                                                                                                      2595
                                                                                                                                                                                                                                                                                                                                     2355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Maeda, Masatsugu
APPLICANT: Maeda, Masatsugu
APPLICANT: Yaguchi, No. US20030009018A1iko
TITLE OF INVENTION: NOVEL HEMOPOIETIN RECEPTOR PRO
FILE REFERENCE: 06501-105US1
CURRENT APPLICATION NUMBER: US/10/105,930
CURRENT FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER: PCT/JP00/06654
PRIOR FILING DATE: 2000-09-27
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: JP 2000-240397
PRIOR APPLICATION NUMBER: JP 2000-240397
PRIOR FILING DATE: 1990-09-03
PRIOR FILING DATE: 1999-09-27
NUMBER OF SEQ ID NOS: 77
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 5
SEQ ID NO 5
LENGTH: 2123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 8
US-10-105-930-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                  S
                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                S
                                             밁
                                                                  S
                                                                                                    밁
                                                                                                                         ঠ
                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 5, Application US/10105930 Publication No. US20030009018A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 72.8%;
Best Local Similarity 99.5%;
Matches 2085; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Homo :
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: CDS
LOCATION: (98)...(1984)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2656 ACCCTGTCTCTACTAAAATTACAAAAATTAGCCGGCCATGGTGGCAGGTGCTTGTAATCC
                  448
                                             367
                                                                        388
                                                                                                      307
                                                                                                                                 328
                                                                                                                                                            247
                                                                                                                                                                                        268
                                                                                                                                                                                                                     187
                                                                                                                                                                                                                                                 208
                                                                                                                                                                                                                                                                            127
                                                                                                                                                                                                                                                                                                         148
                                                                                                                                                                                                                                                                                                                                       67
                                                                                                                                                                                                                                                                                                                                                                  88
                                                                                                                                                                                                                                                                                                                                                                                                             28 CAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGTGGAATTATGTGCTTCAAACAGGTTGAA
                                                                                                                                                                                                                                                                                                                                                                                              7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCAGGAAGGCAGAGGTTGCACT
                                                             AAACTITCTGGAACCACAIGCTTCTATGTACTGCACTGCTGAATGTCCCCAAACATTTTCA 447
                                                                                                                     CATCAAAGAAGATTTCAAATCACAAGGATTAATAAAACAACAGCTCGGCTTTGGTATAA
                                                                                                                                                                            ATATTGCCAAGCAGCAATTAAGAACTGCCAACCAAGGAAACTTCATTTTTATAAAAATGG
                                                                                                                                                                                                                                                                                                                                                         AGAGGGAAACAGTCTTTTCCTGCTTCCAGACATGAATCAKGTCACTATTCAATGGGATGC
                                                                                                                                                                                                                                                                                                                                                                                              CAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGTGGAATTATGTGCTTCAAACAGGTTGAA
AGAGACACTGATATGTGGAAAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGA
                                                                                                                                                                                                                                     CTCTGGCCACATCTGGGTAGAACCAGCCACAATTTTTAAGATGGGTATGAATATCTCTAT
                                                                                                                                                                                                                                                                              AGTAATAGCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATATAAAACTG
                                                                                                                                                                                                                                                                                             AGTAATAGCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATATAAACTG
                                                                                                                                                                                                                                                                                                                                     AGAGGGAAACAGTCTTTTCCTGCTTCCAGACATGAATCAGGTCACTATTCAATGGGATGC
                                              AMACTITICIGGAACCACAIGCTICIAIGTACIGCACIGCIGAAIGTCCCAAACAITITICA
                                                                                                       CATCAAAGAAGATTTCAAATCACAAGGATTAATAAAACAACAGCTCGGCTTTGGTATAA
                                                                                                                                                               ATATTGCCAAGCAATTAAGAACTGCCAACCAAGGAAACTTCATTTTATAAAAATGG
                                                                                                                                                                                                                      CTCTGGCCACATCTGGGTAGAACCAGCCACAATTTTTAAGATGGGTGTGAATATCTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Score 2081.4; pred. No. 0; 2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROTEIN, NR12
                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>د</u>
```

Indels Length 2123

0

Gaps

99

. 387

327 246 267 186 207 126 147

366

487

1626 1647

```
CAATACTACAGTTGTATATATTCCTGATCTCAACACTGGATATAAACCCCCAAATTTCAAA
                                                     CAAGAAGGAGAATACAGGACCCCTGGAGACAAGAGACTACCCGCAAAACTCGCTATTCGA
                                                                                                            TGATCCCATGATTACAGAGATAAAAGAAATCTTCATCCCAGAACACAAGCCTACAGACTA
                                                                                                                              TGATCCCATGATTACAGAGATAAAAGAAATCTTCATCCCAGAACACAAGCCTACAGACTA
                                                                                                                                                                                  AATGCTACAGGAAAATAGTGAACTTATGAATAATTAATTCCAGTGAGCAGGTCCTATATGT
                                                                                                                                                                                                                                         GTTAATACCAAAGTGGCTTTATGAAGATATTCCTAATATGAAAAAACAGCAATGTTGTGAA
                                                                                                                                                                                                                                                                                                   TTCTTTGATTGGGATATTTAACAGATCATTCCGGAACTGGGATTAAAAGAAGGATCTTATT
                                                                                                                                                                                                                                                                                                                                                            CAGAGGAGACATTGGACTTTTATTGGGAATGATCGTCTTTTGCTGTTATGTTGTCAATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                     CACATGGAATTCTGGGCTAACAGTTGCTTCCATCTCTACAGGGCACCTTACTTCTGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTTTTTTCATAAAACACCTGAAACAGTTCCCCAGGTCACATCAAAAGCATTCCAACATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGTATTTCAAGTGAGATGTCAAGAAACAGGCAAAAGGTACTGGCAGCCTTGGAGTTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGACACCAATTTTACATATGTGCAACAGTCAGAATTCTACTTGGAGCCAAACATTAAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTTTTCCTGTGAAATGAGATACAAGGCTACAACCAAACCTTGGAATGTTAAAGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATAAATGCTACAGTGCCCAAGACCATAATTTATTGGGATAGTCAAACAACAATTGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAAATTCACCTGGATGATATAGTGATACCTTCTGCAGCCGTCATTTCCAGGGCTGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAGTACTTGGTTTGGGTCCAAGCAGCAAACGCACTAGGCATGGAAGAGTCAAAACAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAACAGTATCTCACCTCAAGCTATATTAACATCTCCACTGATTCATTACAAGGTGGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAACAGTATCTCACCTCAAGCTATATTAACATCTCCACTGATTCATTACAAGGTGGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAATACTACAGTTGTATATTCCTGATCTCAACACTGGATATAAACCCCAAATTTCAAA
                                                                                                                                                                                                                                                                                      TTCTTTGATTGGGACATTTAACAGATCATTCCGAACTGGGATTAAAAGAAGGATCTTATT
                                                                                                                                                                                                                                                                                                                                             CAGAGGAGACATTGGACTTTTATTGGGAATGATCGTCTTTGCTGTTATGTTGTCAATTCT
                                                                                                                                                                                                                                                                                                                                                                                                    CACATGGAATTCTGGGCTAACAGTTGCTTCCATCTCTACAGGGCACCTTACTTCTGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAAATTCACCTGGATGATATAGTGATACTTTCTGCAGCCGTCATTTCCAGGGCTGAGAC
                                                                                                                                                                                                                               GTTAATACCAAAGTGGCTTTATGAAGATATTCCTAATATGAAAAACAGCAATGTTGTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGAGACACTGATATGTGGAAAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGA
                            1587
                                                       1506
                                                                                   1527
                                                                                                               1446
                                                                                                                                           1467
                                                                                                                                                                                                 1407
                                                                                                                                                                                                                               1326
                                                                                                                                                                                                                                                        1347
                                                                                                                                                                                                                                                                                      1266
                                                                                                                                                                                                                                                                                                                 1287
                                                                                                                                                                                                                                                                                                                                             1206
                                                                                                                                                                                                                                                                                                                                                                         1227
                                                                                                                                                                                                                                                                                                                                                                                                      1146
                                                                                                                                                                                                                                                                                                                                                                                                                               1167
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1047
  1566
                                                                                                                                                                        1386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   786
                                                                                             US-10-105-930-9

Sequence 9, Application US/10105930

Publication No. US20030009018A1

GENERAL INFORMATION:
APPLICANT: Maeda, Masatsugu
APPLICANT: Maeda, Masatsugu
APPLICANT: Yaguchi, No. US20030009018A1iko
FILE REFERENCE: 06501-105US1
CURRENT APPLICATION NUMBER: US/10/105,930
CURRENT FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER: P20/JP00/06654
PRIOR APPLICATION NUMBER: JP 2000-240397
PRIOR APPLICATION NUMBER: JP 2000-240397
PRIOR PILING DATE: 2000-08-03
PRIOR PILING DATE: 2000-08-03
PRIOR PILING DATE: 1999-09-27
NUMBER OF SEQ ID NOS: 77
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 9
SEQ ID NO 9
LENGTH: 1910
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (1)...(1887)
US-10-105-930-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        용, 정
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
 밁
                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 9
US-10-105-930-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                     Query Match
Best Local Similarity
Matches 1906; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1588
TTTTCTGCCTGAGGGAAGCCATCTCAGCAATAATAATGAAATTACTTCCTTAACACTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AACCACCATGCTTTTGGAAAATGATTCACCCAGTGAAACTATTCCAGAACAGACCCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGCTTTTTCTGTTTCAAGTGTGAATTCACTAAGCAACACAATATTTCTTGGAGAATTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTCATATTAAATCAAGGAGAATGCAGTTCTCCTGACATACAAAACTCAGTAGAGGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTCATATTAAATCAAGGAGAATGCAGTTCTCCTGACATACAAAACTCAGTAGAGGAGGA
                                                     66.7%;
ilarity 99.8%;
Conservative
                                                       ; Score 1906; DE; Pred. No. 0; 2; Mismatches
                                                                                   BB
                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                       PROTEIN, NR12
                                                       2
```

유 밁 ঠ

1048

967

907 886

928 847 868 787

Ş

문

유 성

S 밁 S 밁 S 밁 S 뫄

> 607 628 547

밁

727 748 667

1947

1866

1926

2046

1887

1806

1746 1767 1686

ঠ В 5 В S 뫄 성 유

Length 1910;

0

Gaps

0

60

1267

1288

ঠ Ъ ঠ 밁 S 밁 S 뭥 Ś

1087

1147

음 중

중 음 중

959 GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC 1018	179 TOTCATGGAGGANTTACABATATABACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA 238 61 TOTCATGGAGGAATTACABATATABAACTGCTCTGGCCACATCTGGGTAGAACCAGCACA 238 62 TOTCATGGAAGCTCAATTACABATATATCTCCTATTTTAGAACTGCCAA 238 63 TOTCATGGAAACTTCATTTTATABAAATTGCCACABAGGAATTAGAACTACCAA 238 64 TOTTAGAACTACATTTTATABAAATTGCCACABAGGAATTTAAAATCACAGGATT 240 65 AATABAACAACAGCTCGGCTTTGGTATABAAACTTCCTGTTGGAACCACACAGCACTAATCACAGGATT 240 65 AATABAACAACAGCTCGGCTTTGGTATABAAACTTCTGTGAAACAAGCACATTCCAATGTTC 67 TOTCAGATATCCCCABACATTTCCAACGAACAACAATTTCAAAGCAATTCAATT
RESULT 10 US-09-972-708-20 i Sequence 20, Application US/09972708 i Publication No. US20030059871A1 i GENERAL INFORMATION: APPLICANT: Immunex Corporation APPLICANT: Mosley, David J. APPLICANT: Mosley, Bruce A. APPLICANT: Bird, Timothy A. APPLICANT: DiBose, R. APPLICANT: DiBose, R. TITLE OF INVENTION: HEMATOPOIETIN RECEPTORS HPR1 AND HPR2 FILE REFERENCE: 3160-B CURRENT APPLICATION NUMBER: US/09/972,708 CURRENT FILING DATE: 2001-10-05 NUMBER OF SBQ ID NOS: 29 SOFTWARE: PatentIn version 3.1 SEQ ID NO 20 LENGTH: 1890 TYPE: DNA	OY 125 CGANCTGGGATTAANGANGGANCTTATTATAANCANAGTGGCTTTAGANGANATT 138 1141 CGANCTGGGATTAANGANGGANCTTATTATTAANCANAGTGGCTTTATGANGANATT 139 1142 CGANCTGGGATTAANACAGCANTGTTGTTAATTACCANAGTGGCTTTATGANGATAT 139 1313 CCTANTATGANANACAGCANTGTTGTGANATTCCACAGGANAATAGTGGAACTTATGANAT 139 1314 CGANCTGGGATTAANACAGCANTGTTGTGANATTCCACAGGANAATAGTGGAACTTATGANAT 130 1315 CCTANTATGANANACAGCANTGTTGTGANATTCCACAGGANATTACAGGAACTTATGANAT 1316 1316 CATANTTCCAGTGAGACCAAGGCTCACAGCTACAGAACACAGAAATACAGGAACTTACAGAACACAAGCTCACAGGTCTACAGATTCCACAGAACTTACAAGAATACAGGAACTTCCAGGAACACAAGCTCACAGGTCTACAGAATACAAGAAATACAGGAACTCCCTGGAGAACACAAGAACTCCCTATATTCCACAATACTACAGGAACTCCAGGAACACAAAATACTACAGGAACTCCAGGAAATACAAGAATACAAGAATACAAGAATACTACAGCAACACACAAATATTCCAAATATTCCAAAATATTCCAGGAAATACAAGAACTCCCTAGAACACAAATATTCCAAATATTCCAGAAATACAAGAACTCCCTAGAAATACAAATACTCCCTTAGAACACACAATATTCCAAATATTCCAGAAATACAAGAAGCTCCAGGAAAATACAAATACTCCTTAGAACAAATACAAATATTCCAGAAATACAAATACTCCTTAGAAATATTCCAGAAATATTCCAGAAATACAAATACTCCTTAGAAATATTCCAGAAATATTCCAGAAATATTCCAGAAATATTCCAGAAATATTCCAGAAATATTCCAGAAATATTCCAGAAATATTCCAGAAATATTCCAGAAATATTCCAGAAATATTCCAGAAATATTCCAGAAATATTCCAGAAATATTCCAGAAATATTCCAGAAATATTCCAGAAATATTCCAGAAAATATTCCAGAAATATTCCAGAAAATATTCCAGAAACTAATTCCAGAAACAAATATTTCCTTTAAACCACCAGTTTCAGAAAATTCATTC

밁 ঠ 음 중

밁

ঠ 🖁 ঠ

밁 र् B ક 음 성

밁 8 밁 8 밁 ई 음 중

음 성 음 성

음 성 음

```
; ORGANISM: Homo US-09-972-708-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 1887; Conservat
                       901
                                                                                                                                                                       601
                                                                                781
                                                                                                              721
                                                                                                                                           661
                                                                                                                                                                                     719
                                                                                                                                                                                                     541
                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                599
                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                             539
                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                           479
                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                       419
                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                 299
                                                                                                                                                                                                                                                                                                                                                                                                                                               61
CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                       AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                            GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                               CATGTGAAGAGTTTAGAGACAGAAGAAGAAGACACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                              TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                     AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                   CCAAGGAAACTTCATTTTATAAAAATGGCATCAAAGAAGATTTCAAATCACAAGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                ATGAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG
                                                                                                                                                                                                                                                                                             TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                     TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              66.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 1887.6;
Pred. No. 0;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ω
--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <u>,</u>
                                      1078
                                                                  1018
                                                                                840
                                                                                                                           898
                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                           538
                                                                                                                                                                                                                                                                                                                                        478
                                                                                                                                                                                                                                                                                                                                                                     418
                                                                                                                                                                                                                                                                                                                                                                                                 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          178
                        960
                                                                                               958
                                                                                                              780
                                                                                                                                           720
                                                                                                                                                         838
                                                                                                                                                                       660
                                                                                                                                                                                     778
                                                                                                                                                                                                      600
                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                658
                                                                                                                                                                                                                                                                              598
                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
RESULT 11
US-10-715-667-20
US-10-715-667-20
; Sequence 20, Application US/10715667
; Publication No. US20040152161A1
; GENERAL INFORMATION:
; APPLICANT: Inmunex Corporation
; APPLICANT: Cosman, David J.
; APPLICANT: Mosley, Bruce A.
; APPLICANT: Bird, Timothy A.
; APPLICANT: DuBose, Robert F.
                                                                                        음 성
                                                                                                               8 8 8 8 8
                                                                                                                                                                                        중 유
                                                                                                                                                                                                                     성 음
                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                               음 성
                                                                                                                                                                                                                                                                                                                            음 성
                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                       음 성 음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                   1801
                                                                                                                                                                                                                                         1561
                                                                                                                                                                                                                                                        1679
                                                                                                                                                                                                                                                                                                    1441
                                                                                                                                                                                                                                                                                                                                1381
                                                                                                                                                                                                                                                                                                                                              1499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1081
                                                                                                                                   1919
                                                                                                                                                  1741
                                                                                                                                                                1859
                                                                                                                                                                               1681
                                                                                                                                                                                                             1621
                                                                                                                                                                                                                                                                       1501
                                                                                                                                                                                                                                                                                     1619
                                                                                                                                                                                                                                                                                                                  1559
                                                                                                                                                                                                                                                                                                                                                              1321
                                                                                                                                                                                                                                                                                                                                                                            1439
                                                                                                                                                                                                                                                                                                                                                                                           1261
                                                                                                                                                                                                                                                                                                                                                                                                         1379
                                                                                                                                                                                                                                                                                                                                                                                                                        1201
                                                                                                                                                                                                                                                                                                                                                                                                                                      1319
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1259
                                                                                       TTCAATAGGATTTCACTCTTGGAAAAGTAG
                                                                                                                   AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC 1918
                                                                                                                                                                              AGCAACACAATATTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                                                                         AACACTGGATATAAACCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAAT 1618
                                                                                                                                                                                                                                                                                                                                AGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATAATATTCCTGATCTC 1558
                                                                                                                                                                                                                                                                                                                                                                                          AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAAGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                       CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                                                                              CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                         1890
                                                                                                                                                                                                                                                                                     1678
                                                                                                                                                                                                             1680
                                                                                                                                                                                                                                           1620
                                                                                                                                                                                                                                                                                                                                                               1380
                                                                                                                                                                                                                                                                                                                                                                                                                                       1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1140
                                                                                                                                                                                                                                                                                                                                                                                                                         1260
```

8 8 8 8 8 8

8 B

8 8 8 8 8 8 8

중 유

중 유

5

음 성 밁 ঠ 문 S 밁 ち 유

ঠ

음 성

OY 839 TATTGGGATAGTCAAACAACTAGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA 898	OY 779 TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT 838	QY 719 GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT 778	Qy 659 ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAAC 718	Qy 599 CATGTGAAGAGTTTAGAGACAGAAGAGAGAGAACAGTATCTCACCTCAAGCTATATTAAC 658	QY 539 AACATGACTTGCACCTGGAATGCTRGAAACTCACCTACATAGACACAAAATACGTGGTA 598	Oy 479 TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC 538	QY 419 TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT 478	QY 359 AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC 418	Qy 299 CCAAGGAAACTTCATTTTTATAAAATGGCATCAAAGAAAG	Qy 239 ATTITTAAGATGGGTATGAATATCTCTTATATATTGCCAAGCAGCAATTAAGAACTGCCAA 298	QY 179 TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA 238	ATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG 17 	300	; LENGTH: 1890 ; TYPE: DNA ; TYPE: DNA ; ORGANISM: Homo sapiens US-10-715-667-20	PRIOR FILING DATE: 2001-10-05 NUMBER OF SEQ ID NOS: 29 SOFTWARE: Patentin version 3.1 SEO ID NO 20	FILE REFERENCE: 3160-B FILE REFERENCE: 3160-B CURRENT APPLICATION NUMBER: US/10/715,667 CURRENT FILING DATE: 2003-11-16 PRICE APPLICATION NUMBER: US/10/972,708	APPLICANT: Wiley, Steven R.
9	S B S	S & S	B &	₽ \$? B &	, B &	B 5	\$, p. 6	Db 49	, B &	Db Qy	å å	d A	dg Qy	B &	Вb
	1859 AGIGAAACIAIICAWAACAGACCLIGCIICUGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA	CCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAAATGATTCACCCCCTGACATACAAAACTAGATTCACCCCCCCC	739 AGCARCACATATTTCTTGCAGAATTAAGCCTCATATTAAATCAAGGAAGAAGCAGTTCT 621 AGCAACACAATATTTCTTGCAGAATTAAGCCTCATATTAAATCAAGGAAGAAGCAGTTCT 621 AGCAACACAATATTTCTTGCAGAATTAAGCCTCATATTAAATCAAGGAAATGCAGTTCT	b/y AATICCAGGITACAAANGCATCCTAAITITGCTTTTTCTGTTTCAAGTGTGAATTCACTA 162	ATTARIGAAMITACTITCCITAACACTITAAACCACCACTIGATICCITAGACTCAGGAAT 107 AATTARIGAAMITACTITCCITAACACTTAAACCACCACTIGATTCCTTAGACTCAGGAAAT 156 AATTARIGAAMITACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT 156			1439 TCATICCAGACACAGACCIACAGACIACAGACAGAGAGAATACAGAGAGACCCCTGGAGACACIAGAGAGACAGAGAGAGAGAGAGAGAGAGAGA	ANTANTYCCAGTGAGCAGGGTCTATATGTTGATCCCATGATTACAGGGATAAAAGAAATC 143	CTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT	CGAACTIGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCCTTTATGAAGATATT CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCCTTTATGAAGATATT	ATCGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTC	ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG 119	1079 CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC 1138 	1019 AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCC 1078	959 GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC 1018 	781 ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA 840

```
Sequence 22, Application US/09972708

Publication No. US20030059871A1

GENERAL INFORMATION:

APPLICANT: Immunex Corporation

APPLICANT: Cosman, David J.

APPLICANT: Mosley, Bruce A.

APPLICANT: Bird, Timothy A.

APPLICANT: DuBose, Robert F.

APPLICANT: Wiley, Steven R.

TITLE OF INVENTION: HEMATOPOIETIN RECEPTORS HPR1 AND HPR

FILE REFERENCE: 3160-B

CURRENT APPLICATION NUMBER: US/09/972,708

CURRENT FILING DATE: 2001-10-05

NUMBER OF SEQ ID NOS: 29

SOFTWARE: PatentIn version 3.1

SEQ ID NO 22

LENGTH: 1698

TYPE: DNA

ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 12
US-09-972-708-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-972-708-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 1695; Conserv
                                                                                                                                                                                                                                                                479
                                                                                                                                                                                                                                                                                          301
             601
                                                                                                                        481
                                                                                                                                                 599
                                                                                                                                                                             421
                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                   419
                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                          359
                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    179 TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          119 ATGAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                    CATGTGAAGAGTTTAGAGACAGAAGAAGAAGACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                             AACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                    TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                    TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                          TGCACTGCTGAAATGTCCCCAAACATTTTCAAGAGACACTGATATGTGGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                          TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                 AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                              AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGAATCAGGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG
                                                                                                                                                                                AACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             52.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1493.6;
Pred. No. 0;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels 192;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 1698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                        778
                                                                                                                                                                                480
                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                538
                                                                                                                                                                                                                                                                                                                     478
                                                                                                                                                                                                                                                                                                                                                                             418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        178
                                                                  600
                                                                                                                        540
                                                                                                                                                    658
                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                   358
              660
                                                                                                                                                           S
                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                              망
                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
ફ
                        망
                                              S
                                                                                밁
                                                                                                    S
                                                                                                                              밁
                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                     1369
                                                                                                                                                                                                                                                                              1559
                                                                                                                                                                                                                                                                                                        1189
                                                                                 1429
                                                                                                                                                                 1679
                                                                                                                                                                                             1309
                                                                                                                                                                                                                                                    1249
                                                                                                                                                                                                                                                                                                                                   1499
                                                                                                                                                                                                                                                                                                                                                              1129
                                                                                                                                                                                                                                                                                                                                                                                                                       1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1319
                                                                                                                                                                                                                        1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AACACTGGATATAAACCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAAT 1618
                                                                                                                                                                                                                                                                                                                                                              TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACA 1498
                                                                                                                                                                                                                                                                                                                                                                                                                                     AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC 1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT 1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCC 1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA 898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC 191e
                                          CCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCC 1858
                                                                                                AGCAACACAATATTTCCTTGGAGAATTAAGCCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                              AATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT
                                                                                                                                                                                                             AATAATGAAATTACTTCCTTAACACTTAAAACCACCAGTTGATTCCTTAGACTCAGGAAAT
                                                                                                                                                                                                                                                                                                        AGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTTCCTGATCTC 1558
                                                                                                                                                                                                                                                                                                                                                                                                                     ANTANTTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----GGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT 1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TATTGGGATAGTCAAACAATTGAAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                 AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCGTCTTTGCTGTTATGTTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTC 1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG 1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC 1138
                                                                                                                                                                                              1368
                                                                                                                                                                                                                       1678
                             1548
                                                                                    1488
                                                                                                                                        1428
                                                                                                                                                                                                                                                                                                           1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         958
                                                                                                                                                                                                                                                                                                                                                                                                                        1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780
```

δ

ર્જ

음 성 음

ર્જ 밁 δ Вb S

뭐

Ś

В

ঠ

В

ঠ 밁 ð 밁

밁

Db 241 ATAAAACAACAGCTYGGCTTTAAAAAACTTTCTGGAACACACATGCTTCTATGTAC 300 Qy 419 TGCACTGCTGAATGTCCCAAACATTTCAAGAGACACTGATATGTGGAAAAAGACATTTCT 478	OY 239 ATTITTAAGATGGGTATGAATATCTCTATATATTTGCCAAGCAGCAATTAAGAACTGCCAA 298	Query match 189.7%; pred. No. 0; Best Local Similarity 89.7%; pred. No. 0; Matches 1695; Conservative 2; Mismatches 1; Indels 192; Gaps 1; Qy 119 ATGAATCAKGTCACTATTCAATGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG 178	Cor SM(1D NOS: 29 E: PatentIn version 3.1 O 22 O 12 O 12	APPLICANT: BIDG, TINGTHY A. APPLICANT: Bullose, Robert F. APPLICANT: Wiley, Steven R. TITLE OF INVENTION: HEMATOPOLISTIN RECEPTORS HPR1 AND HPR2 FILE REFERENCE: 3160-B CURRENT APPLICATION NUMBER: US/10/715,667 CURRENT APPLICATION NUMBER: US/09/972,708 PRIOR APPLICATION NUMBER: US/09/972,708 PRIOR PILING DATE: 2003-11-005	0 - 1	Db 1549 AGTGAAACTATTCCAGAACAGACCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC 1608 Oy 1919 GTGAATGAGGAGTTGCCCATCTATTATACTTTTTCCACAAAATATTTTGGAAAAGCCAC 1978
1499 1189 1559 1249 1619 1309	Oy 1319 CCTAATATCAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGATGTTGATCCCATGAATACAGGAACAAAAAAAA	955 1199 955 1259 955	Db 901 AAAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAAAACA Qy 1079 CAGGTCACATCAAAAGCATTCCAACAATGGACTTCTCGGGCTAACAGTTGCTTCC Db 955	OY 899 ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA	OY 779 TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT Db 661 TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT OY 839 TATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA Db 721 TATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA	OY 599 CATGTGAAGAGTTTAGAGACAGAAGAAGAACAGTATCTCACCTCAAGCTATATTAAC
	GTACAGGAAATAGTGAACTTATGAAT	TTTGATTGGGATATTTAACAGATCATTC 1258	TTTTCATAAAACACCTGAAACA 954 aTGGAATTCTGGGCTAACAGTTGCTTCC 1138 954 aGGAGACATTGGACTTTATTGGGAATG 1198	CACCAATTTACATATGTGCAACAGTCA 958	AAATGCTACAGTGCCCAAGACCATAATT 838	ACAGTATCTCACCTCAAGCTATATTAAC 658

RESULT 14 US-10-105-390-3 Sequence 3, Application US/10105930 Publication No. US20030009018Aliko Publication No. US20030009018Aliko APPLICANT: Yaguchi, No. US20030009018Aliko TITLE OF INVENTION: NOVEL HOMPODIETIN RECEPTOR PROTEIN, NR12 FILE REFERENCE: 06501-105US1 CURRENT PPLICATION NUMBER: US/10/105,930 CURRENT PPLICATION NUMBER: US/10/105,930 CURRENT PPLICATION NUMBER: US/10/105,930 CURRENT PPLICATION NUMBER: US/10/105,930 CURRENT FILING DATE: 2000-09-27 PRIOR PRICATION NUMBER: 19200-203-25 PRIOR PRICATION NUMBER: 19200-203-27 PRIOR PRICATION NUMBER: 19200-203-27 PRIOR PRICATION NUMBER: 19200-203-27 PRIOR PRICATION NUMBER: 19200-203-27 PRIOR PRILATION NUMBER: 19200-203-27 PRIOR PRICATION NUMBER: 19200-203-27 PRIOR PRILATION NUMBER: 1920-09-27 PRIOR PRICATION NUMBER: 19200-203-27 PRIOR PRICATION NUMBER: 19200-203-27 PRIOR PRICATION NUMBER: 19200-203-27 PRIOR PRICATION NUMBER: 1920-09-27 PRIO	Qy 1979 TTCAATAGGATTTCACTCTTGGAAAAGTAG 2008	OY 1919 GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTTGGAAAGCCAC 1978 	Qy 1859 AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC 1918	Qy 1799 CCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCC 1858	Qy 1739 AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT 1798	Db 1369 AATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGTGTGAATTCACTA 1428
8	Qy Db	Db Qy	g Q	D Qy	D Qy	Db
628 GCAACAGTATCTCACCTCAAGCTNTATTAACATCTCCACTGATTCATTACAAGGTGGCAA 687	568 GCTCACCTACATAGACACAAAATACGTGGTACATGTGAAGAGTTTAGAGACAGAAGAAGA 627	508 AGTAACCTGTGTCATTTATGAATATTCAGGCAACATGACTTGCACCTGGAATGCTRGGAA 567	448 AGAGACACTGATATGTGGAAAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGA 507	388 AAACTITCTGGAACCACATGCTTCTATGTACTGCACTGCTGAATGTCCCAAACATTTTCA 447	328 CATCAAAGAATTTCAAATCACAAGGATTAATAAACAACAGCTCGGCTTTGGTATAA 387 	

밁

1327

AATGCTACAG 1336

```
GENERAL INFORMALIANT
APPLICANT: Magatagu

APPLICANT: Magatagu

APPLICANT: Maguchi, No. US2003009018A1iko

TITLE OF INVERTION: NOVEL HEMOPOIETIN RECEPTOR PROTEIN, NR12

FILE REFERENCE: 06551-105US1

CURRENT APPLICATION NUMBER: US/10/105,930

CURRENT FILING DATE: 2002-03-25

PRIOR APPLICATION NUMBER: PCT/JP00/06654

PRIOR FILING DATE: 2000-09-27

PRIOR APPLICATION NUMBER: JP 2000-240397

PRIOR FILING DATE: 2000-09-03

PRIOR FILING DATE: 2000-09-03

PRIOR FILING DATE: 1990-09-27

NUMBER: JP 11-273358

PRIOR FILING DATE: 1999-09-27

NUMBER: OF SEQ ID NOS: 77

SOCTWARE: F084USEQ for Windows Version 4.0

SEQ ID NO 7

LENGTH: 1301

TYPE: DNA

ORGANISM: Homo sapiens

PRATURE:

NAME/KEY: CDS

1 CCATION: (1) ... (1284)

US-10-105-930-7
                                                문
                                                                      र्
                                                                                                        멍
                                                                                                                                 ð
                                                                                                                                                            밁
                                                                                                                                                                                           ક
                                                                                                                                                                                                                                 음 성
                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                र्
                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 15
US-10-105-930-7
                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 7, Application US/10105930 Publication No. US20030009018A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 43.3%;
Best Local Similarity 99.8%;
Matches 1236; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                            599
                                                                                                            421
                                                                                                                                         539
                                                                                                                                                                        361
                                                                                                                                                                                                    479
                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                 419
                                                                                                                                                                                                                                                                                              241 AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                             359 AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                         299
                                                                                                                                                                                                                                                                                                                                                                                                                      121 ATTITTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                     239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           179 TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATGTGAAGAGTTTAGAGACAGAAGAAGAAGAACAGTATCTCACCTCAAGCTATATTAAC
                                                                 CATGTGAAGAGTTTAGAGACAGAAGAAGAAGACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                           AACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                              AACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                      TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                         TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                   TGCACTGCTGAATGTCCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                    TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                                           ATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 1236.6; DB 6; Length 1301; Pred. No. 7.3e-309; 2; Mismatches 1; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                540
                                                                            658
                                                                                                            480
                                                                                                                                         598
                                                                                                                                                                      420
                                                                                                                                                                                                    538
                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                 478
                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                             418
                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                        358
                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                     298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             178
                   718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
```

CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAG 1239	1201	용
CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAG 1357	1319	\$
CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT 1200	1141	뮹
CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT 1318	1259	ठ
ATCGTCTTTGCTGTTATGTTGAATTCTTTCTTTGATTGGGATATTTAACAGATCATTC 1140	1081	뮹
ATCGTCTTTGCTGTTATGTTTGCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTC 1258	1199	S
ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG 1080	1021	뭥
ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG 1198	1139	Ş
CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC 1020	961	망
CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC 1138	1079	\$
AAAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAAACAGTTCCC 960	901	뭥
AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCCTGAAACAGTTCCC 1078	1019	ঠ
GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC 900	841	문
GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCCAAGTGAGATGTCAAGAAACAGGC 1018	959	ঠ
ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCCAATTTTACATATGTGCAACAGTCA 840	781	F
ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA 958	899	8
TATTGGGATAGTCAAACAATTGAAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA 780	721	용
TATTGGGATAGTCAAACAACTAGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA 898	839	8
TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT 720	661	ઠ
TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCCATAATT 838	779	8
GCACTAGGCATGGAAAGAGTCAAAAACAACTGCAAAATTCACCTGGATGATATAGTGATACCT 660	601	망
GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT 778	719	8
ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAAC 600	541	뮹

Search completed: October 14, 2006, 14:34:25
Job time: 3012 secs

```
Regult
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Post-processing: Minimum Match 0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB
            2081.4
1906
1887.6
1773.8
1556.2
1555.2
1505.2
1440.2
1440.2
                                                                                                                                 2824.4
2810.2
                                                                                                                                                                                                             Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               seq length: 0
seq length: 2000000000
            100.0
100.0
100.0
100.0
100.0
98.8
98.3
72.8
66.7
66.7
66.1
54.5
54.5
52.7
52.3
                                                                                                                                                                                                            Query
                                                                                                                                                                                                                                                                                                                                                                  10:
8:
                                                                                                                                                                                                                                                                                                                                                                                                                                              GenEmbl:*
1: gb_env:
2: gb_pat:
3: gb_ph:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-667-289-1
2857.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     October 14, 2006, 12:25:14 ; Search time 15913 Seconds (without alignments) 11489.077 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6366136 seqs, 31973710525 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IDENTITY_NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Maximum Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Copyright
                                                                                                                                                                                                                                                                                                        gb un: *
gb vi: *
gb ov: *
gb htg: *
gb in: *
gb om: *
gb ba: *
                                                                                                                                                                                                                                                                                                                                                                                                                                  gb_env:*
gb_pat:*
gb_ph:*
                                                                                                                                                                                                                                                                                                                                                                                        gb_sv:*
gb_sts:*
2859
2859
2859
2859
2859
2826
2826
2826
2123
11676
11676
11676
11698
11698
11618
11618
                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GenCore version 5.1.9 (c) 1993 - 2006 Biocceleration Ltd
                                                                                                                                                                                                              DB
  N U U U U N U U U U N N N N N U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100%
                                AX467350
AY937250
AY937253
AY937254
AL389925
AX467352
AY937251
                                                                                                          AX338549
AF461422
AX467349
BD013243
BD013245
                                                                                                                                                               CQ878371
CS110317
AR561607
                                                                                                                                                                                                             IJ
                                                                                                                                                                                                                                             SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12732272
        CQ878371 Sequence
CS110317 Sequence
AR561607 Sequence
AR338549 Sequence
AR461422 Homo sapi
AX467345 Sequence
BD013243 Novel hem
BD013245 Novel hem
BD013245 Novel hem
AX467350 Sequence
AY937250 Homo sapi
AY937254 Homo sapi
AY937254 Homo sapi
AX937254 Homo sapi
AX467352 Sequence
AX937254 Homo sapi
AX467352 Sequence
AX937255 Homo sapi
AX467352 Sequence
AX937255 Homo sapi
AX937255 Homo sapi
                                                                                                                                                                                                            Description
```

ი	ဂ	a	ი	a	a	ი	ဂ			O		ი				ი										
45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19
254	254	254	254	254	255.4	258.2	258.2	268	299.4	358	358	358	375	375	375	410.4	846.2	1039.2	1043.4	1105.8	1120.2	1140.6	1213.6	1236.6	1291.2	1322.8
8.9 1	؈		8.9 1	٠,	8.9		9.0 1	9.4	'n	12.5 2	12.5 1	'n	ï	.1	3.1	4	•	36.4	36.5	38.7	39.2	39.9	42.5	43.3	45.2	46.3
159994	140305	139932	133839	108253	76727	182557	157580	439	114713	216956	181390	110000	236635	235198	219288	220412	1152	1784	1071	1935	2488	1155	1324	1301	1532	1479
12	v	12	12	v	ហ	12	v	N	v	σ	σ	12	12	12	12	12	N	N	N	N	0	N	v	N	5	N
CT485605	CT485994	AC016071	CT573214	AL136164	HS821D11	AC091942	AC010297	CQ745744	HSDJ763G1	AC124758	AC159129	AY657029_3	AC126525	AC106222	AC111912	AC167151	AX054991	BD013241	AX467354	AX467359	AF461423	AX054989	BC016829	BD013244	BC040720	BD013242
CT485605 Pan trogl	CT485994 RP43-077B	AC016071 Homo sapi	CT573214 Pan trogl	AL136164 Human DNA	AL021453 Human DNA		AC010297 Homo sapi	CQ745744 Sequence	AL109843 Human DNA	AC124758 Mus muscu	AC159129 Mus muscu	Continuation (4 of	AC126525 Rattus no	AC106222 Rattus no	AC111912 Rattus no	AC167151 Bos tauru	AX054991 Sequence	BD013241 Novel hem	AX467354 Sequence	AX467359 Sequence	AF461423 Mus muscu	AX054989 Sequence	BC016829 Homo sapi	BD013244 Novel hem	BC040720 Homo sapi	BD013242 Novel hem

ALIGNMENTS

```
RESULT 1
CQ878371
LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
                                              mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oft,M. and Mcclanahan,T.K.
Uses of il-23 agonists and antagonists; related reagents
Patent: WO 2004081190-A 5 23-SEP-2004;
SCHERING CORPORATION (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 5 from Patent CQ878371 CQ878371.1 GI:53790924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CQ878371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hominidae; Homo.
                                                                                                                                                                                        /COGOO STATE = 1
// COGOO STATE = 1
// POOCO STATE 
                                                                                                 SLLEK"
                                                                                                                                                    VEESTTMLLENDSPSSTIPEQTLLPDSFVSCLGIVNESLPSINTYFPQNILSSHFNRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
119. .2008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
/product="unnamed"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          note="unnamed protein product"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2859 bp D
from Patent WO2004081190.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 04-OCT-2004
```

, B &	8 8	B 8	D Q	g Q	gg Qy	g &	g qq	B &	유 성	B &	B 8	B 8	D Q	g Q	음 성	p &	Query Ma Best Loc Matches	
961 ATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAA 1020 	901 AAACCAAACTTGGAATGTTAAAGAATTTTGACACCAATTTTACATATGTGCAACAGTCAGA 960 	841 TTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACAAC 900	781 TGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATTTA 840	721 ACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCTTC 780	661 CTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTTGGGTCCAAGCAGCAAACGC 720 	601 TGTGAAGAGTTTAGAGACAGGAAGAAGAACAGTATCTCACCTCAAGCTATATTAACAT 660 	541 CATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAAATACGTGGTACA 600	481 TGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGCAA 540	421 CACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCTTC 480	361 TAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTACTG 420	301 AAGGAAACTTCATTTTATAAAAATGGCATCAAAGAAGATTTCAAATCACAAGGATTAA 360 	241 TTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAACC 300	181 TCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACAGCAAT 240	121 GAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGGTG 180 	61 GGAATTATGTGCTTCAAACAGGTTGAAAGAGGGGAAACAGTCTTTTCCTGCTTCCAGACAT 120 	1 GTGGTACGGGAATTCCATTGTGTTGGGCAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGT 60	Match 100.0%; Score 2857.4; DB 2; Length 2859; cal Similarity 100.0%; Pred. No. 0; self-similarity 100.0%; Pred. No. 0; Indels 0; Gaps 0; 2859; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
В Q) B 4	?	S & &	?	S B &	}) B &	S B 7	S B 8	? B 4	S B 8	S B 7	5 B &	? B 4	;	§ B	& B	ঠ
2041 GCCTTGCAATCTGAACTTGGGTTTTCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGA 2100 2041 GCCTTGCAATCTGAACTTGGGTTTTCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGA 2100	CAATAGGATTTCACTCTTGGAAAAGTAGAGCTGTTGTGGTCAAAATCAATATGAGAAAGCT	CANTO CONTROL OF THE	TOWARD LATT CONSERVATION CONTROL SET TO THE TENT OF THE TOWARD LATTER TO THE TOWARD LATTER TOWARD LATTER TO THE TOWARD LATTER TO				TAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAATAA	TARTER ARTECTTCCTTARCACTTARACCCCCARTTCTTCTTCTTCTTCTTTTTCTTCTTTTTCTTTTTTCTTTT		CATCCCAGAACACCCTACAGACTACAAGAAGGAAGAATACAGGACCCCTGGAGACAAG	TARIT COLOR TO THE CONTROL OF THE CO			COTOCO TETA A ACCA TOTAL TOTAL TOTAL A BACACCATT A TRACAGATA TA TOCO				1021 AAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCA 1080

```
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                RESULT 2
CS110317
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                           $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                FEATURES
                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                  ORGANISM
                                                                                                                                                        ı
                                                                                                                                                                                                                                                                                                                                                                      2821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2581
                                                                                                                                                                                                                                 Sequence 1
CS110317
CS110317.1
                                                                                                                                                                                  Homo
                 Chirica,M., Kastelein,R.A., Moore,K.W. and Parham,C.L. I1-23 and its receptor; related reagents and methods Patent: WO 2005052157-A 1 09-JUN-2005; Schering Corporation (US)
Location/Qualifiers
1 2859
                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                  Hominidae;
                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                      GCAACAAGAGCAAAACTCTGTCTGGAAAAAAAAAAAAA 2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGAGTCCAGCCTGGCCAATATGCTGAAACCCCTGTCTCTACTAAAATTACAAAAATTAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGAGTCCAGCCTGGCCAATATGCTGAAAACCCCTGTCTCTACTAAAATTACAAAAATTAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGCTTGTAATCCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GATGCAAAACAGCTCTCTATTGTGTACAGAAAGGGTAAATAATGAAAAATACCTGGTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTCCCGAAGGTGGAACATGCTTCATGGTCACACATACAGGCACAAAAAACAGCATTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGTCCCGAAGGTGGAACATGCTTCATGGTCACACATACAGGCACAAAAAACAGCATTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCCATGCCTTTTTAATTTTTAGCCATTCTTCTGCCTMATTTCTTAAAATTAAAATTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCCATGCCTTTTTAATTTTAGCCATTCTTCTGCCTMATTTCTTAAAATTAGAGAATTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGTTTCCAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATACCTAGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTTCTACCAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAAAATGTATTCACATACAAATCTTCACATGGACACATGTTTTCATTTCCCTTGGATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCCATGGTGGCAGGTGCTTGTAATCCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTTTCCAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AMAMATGTATTCACATACAAATCTTCACATGGACACATGTTTTCATTTCCCTTGGATAA
                                                                                                                                                                                  sapiens
 organism="Homo sapiens"/
                                                                                                                                                                                                                                                                  2859 bp E
from Patent WO2005052157.
                                                                                                                                     Homo.
                                                                                                                                                                                                                                    GI:68148524
                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                   PAT
                                                                                                                                                                                                                                                                                   22-JUN-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2160
                                                                                                                                                                                                                                                                                                                                                                                                                                        2820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2820
                                                밁
                                                                            S
                                                                                                                  밁
                                                                                                                                        र्
                                                                                                                                                                                밁
                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Sim
Matches 2859;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mat_peptide
                                                                                                                                              541
                   661
                                                                                                                  541
                                                                                                                                                                                481
                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                  601
                                                                                 601
                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
CTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTTGGGTCCAAGCAGCAAACGC
                                                                                                                                        CATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAAATACGTGGTACA
                                                                                                                                                                                                     TGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGCAA
                                                                                                                                                                                                                                                                     CACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAAGACATTTCTTC
                                                                                                                                                                                                                                                                                                                 TAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTACTG
                                                                                                                                                                                                                                                                                                                                                                                                       AAGGAAACTTCATTTTATAAAAATGGCATCAAAGAAGATTTCAAATCACAAGGATTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTTACATACTCTTCAGCTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCCTTTACATACTCTTCAGCTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAATTATGTGCTTCAAACAGGTTGAAAGAGGGGAAACAGTCTTTTCCTGCTTCCAGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAATTATGTGCTTCAAACAGGTTGAAAGAGGGAAACAGTCTTTTCCTGCTTCCAGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGGTACGGGAATTCCATTGTGTTGGGCAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGGTACGGGAATTCCATTGTGTTGGGCAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGT
                                                                       TGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAACAT
                                                                                                                  CATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTACA
                                                                                                                                                                                                                                                                                                                                                                                      TCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACAAT
                                                    TGTGAAGAGTTTAGAGACAGAAGAAGAAGCAACAGTATCTCACCTCAAGCTATATTAACAT
                                                                                                                                                                                    TGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGCAA
                                                                                                                                                                                                                                                    CACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAAGACATTTCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTTAAGATGGGTATGAATATCTCTATATATTĞCCAAGCAGCAATTAAGAACTGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /proceIn_id="GAJ09921.1"

//bb xref="q1:68148525"

//db xref="q1:68148525"

//translation="maxvtiqwabavialyilfswchggitnincsghiwvepatifkm

/translation="maxvtiqwabavialyilfswchggitnincsghiwvepatifkm

/translation="maxvtiqwabavialyilfswchaftsycytlotkyvv

AECPEMFQETLICGKDISGGYPPDIPDIPDEVTCTYYEYSGMMTCTWABXKLTYIDTKYVV

HVKSLETEERQCYLTSSYINISTDSLQGGKKYLVWVQAANALTMQTMNVCEFDTNFTY

VPSAAVISRAETINATVPKTLIYWDSCTTIEKVSCEMRYKATTMQTMNVCEFDTNFTY

VQQSEFYLEPNIKYVFQVRCQETGKRYWQPWSSPFHKTPETVPQVTSKAFQHDTWNS

GLTTVASISTGHLTSDNRGDIGLLCMTVFAVNLSILSLIGIFNRSFRTGIKRILLLI

PKMLYEDIPMKNSNVVKMLQENSELMNNUSSBQVLYVDPMITBIKEIFLENINNEITSLT

KKENTGPLETEDYPQNSLFDNTTVVYIDDLNTGYKPQISNFLPBGSHLSNNNEITSLT

LKEPYDSLDSGNNPRLQKHPNRAFSVSSVNSLSNTIFLGELSLILNQBECSSPDIONS

LKEPYDSLDSGNNPRLQKHPNRAFSVSSVNSLSNTIFLGELSLILNGBECSSPDIONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SLLEK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VEEETTMLLENDSPSETIPEQTLLPDEFVSCLGIVNEELPSINTYFPQNILESHFNRJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned
/db_xref="taxon:9606"
119. .2008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /product="unnamed"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             188. .2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="unnamed protein product"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 2857.4;
Pred. No. 0;
); Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ٠.
در
```

Indels Length

Gaps

240

180 180 120 120 60 60 0

720 660 660 600 600 540 540 480 480 420 420 360 360 300 300 240

2859; 0,

901 ANACCANACTTGGAATGTTANGAATTTGACCCANTTTTACATTGACACAGGTCA	TAGTCATTAC
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	3 6 8 6 8 6
ANTAGGATTTCACTCTTTGGAAAATTAGATACTTATTTACCACAAAATTAGAAATTCAATATTAGAAAGCTTTTGGATTTGGATTTTGGATATTTGGAAAATTCAATATTGAAAATTCAATATTGAAAAGCTTTTGGATTAGAAATTCAATATTGAAAATTCAATATTGAAAAGCTTCTTTGGATTAGAAATTCAATATTGAAAATTCAATATTGAAAATTCAATATTGAAAATTCAATATTGAAAATTCAATATTGAAAATTCAATATTGAAAATTCAATATTGAAAATTCAATATTGAAATTCTGCCTTCTTTTGAATAAAATTCAATATTGAATTCTGCCTTCTTTTGAATAAAAAAAA	

```
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 3
AR561607
LOCUS
                                          8 8 8 8 8 8 8
                                                                                                                                                           음 성 음
                                                                                                                                                                                                         8
                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                          중 유
                                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                 밁
 음 성 음
                                                                                                                                                                                                                                                                                                                                                                             ্হ
                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
source
                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Best Local Similarity 100.0%; Matches 2859; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unclassified.

1 (bases 1 to 2859)

1 (bases 1 to 2859)

1 (chirica,M., Kastelein,R.A., Moore,K.W. ar Chirica, M., Kastelein, R.A., Moore, K.W. ar II-23 receptor binding compositions
Patent: US 6756481-A 1 29-UUN-2004;
Schering Corporation; Kenilworth, NJ Location/Qualifiers
                                                                                                                               421
                                                                                                                                              421
 661
                661
                                 601
                                                601
                                                                                                481
                                                                                                               481
                                                                                                                                                                361
                                                                                                                                                                               361
                                                                                                                                                                                                301
                                                                                                                                                                                                                301
                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR561607
Sequence 1 1
AR561607
AR561607.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
Unknown.
                                                                                                                                                                                                                                                               TCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACAAT
                                                                                                                                                                                                                                                                                                                                                                GTGGTACGGGAATTCCATTGTGTTGGGCAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGT
TGTGAAGAGTTTAGAGACAGAAGAAGAAGACACAGTATCTCACCTCAAGCTATATTAACAT
                                                                          CATGACTTGCACCTGGAATGCTTRGGAAGCTCACCTACATAGACACAAAATACGTGGTACA
                                                                                               TAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTACTG
                                                                                                                                                                        TAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTACTG
                                                                                                                                                                                               TTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAACC
                                                                                                                                                                                                                                                                                                 GAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGGTG
                                                                                                                                                                                                                                                                                                           GAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGGTG
                                                                                                                                                                                                                                                                                                                                GGAATTATGTGCTTCAAACAGGTTGAAAGAGGGGAAACAGTCTTTTCCTGCTTCCAGACAT
                                                                  CATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="unknown"
/mol_type="genomic |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GI:53974707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  patent US
                                                                                                                                                                                                                                                                                                                                                                                                Score 2857.4;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6756481.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          đđ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                 DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and
                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                                                                                                                                                 2;
                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT
                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-OCT-2004
                720
                                 660
                                                                                                540
                                                                                                                               480
                                                                                                                                                480
                                                                                                                                                                420
                                                                                                                                                                                420
                                                                                                                                                                                                360
                                                                                                                                                                                                                360
                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                 0
                    S
                                    밁
                                                                        유
                                                                                                       밁
                                                                                                                                                  δ
                                                                                                                                                                      밁
                                                     δ
                                                                                                                  ঠ
                                                                                                                                 문
                                                                                                                                                                                   S
                                                                                                                                                                                                   밁
                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                   음 성
                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                       片
                                                                                                                                                                                                                                                                                                                                                                                                                    정 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    & 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                        1621
                                                                                                                                        1501
                                                                                                                                                                                      1441
                                                                                                                                                                                                                                                                                        1261
                                                                                                                                                                                                                                                                                                         1201
                                                                                                                                                                                                                                                                                                                       1201
                                                                                                                                                                                                                                                                                                                                         1141
                                                                                                                                                                                                                                                                                                                                                                          1081
                                                                                       1621
                                                                                                       1561
                                                                                                                                                                                                                                                       1321
                                                                                                                                                                                                                                                                         1261
                                                                                                                                                                                                                                                                                                                                                                                         1081
                                                                                                                                                                                                                                                                                                                                                                                                         1021
                                                                                                                                                                                                                                                                                                                                                                                                                         1021
                                                                                                                                                                                                                                                                                                                                                                                                                                         961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCTTC
                                        TCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGTGTGAATTCACTAAG
                                                                        CATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACAAG
                                                                                                                                                                                                      AACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATTCC
                                                                                                                                                                                                                                                                                                        CGTCTTTGCTGTTATGTTGTCAATTCTTTCATTGATTGGGATATTTAACAGATCATTCCG
                                                                                                                                                                                                                                                                                                                                                                         GGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCCAT
                                                                                                                                                                                                                                                                                                                                                                                                         AAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTCATAAAACACCTGAAACAGTTCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCTCC
                                                                                                                                                AGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATTTCTTGATCTCAA
                                                                                                                                                                                                                                        TAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAATAA
                                                                                                                                                                                                                                                 TAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAATAA
                                                                                                                                                                                                                                                                                                                                          CTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAA
                                                                                                                                         AGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTCAA
                                                                                                                                                                                                                                                                                                                                                         CTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAA
                         1800
                                                                         1680
                                                                                        1680
                                                                                                         1620
                                                                                                                        1620
                                                                                                                                                        1560
          1800
                                                                                                                                         1560
                                                                                                                                                                        1500
                                                                                                                                                                                         1500
                                                                                                                                                                                                        1440
                                                                                                                                                                                                                        1440
                                                                                                                                                                                                                                         1380
                                                                                                                                                                                                                                                                                                         1260
                                                                                                                                                                                                                                                                                                                                          1200
                                                                                                                                                                                                                                                                                                                                                          1200
                                                                                                                                                                                                                                                                                                                                                                                                                                          1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
```

```
2401
                                                                                                                                                                                                                                                                                                                                                                                                                         2461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1861
                                                                                                                                                                                                                                                                       2581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2221
TTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGG
                                                                                                                                         GGCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCAC
                                                                                                                                                                                                                 CGAGTCCAGCCTGGCCAATATGCTGAAAACCCTGTCTCTACTAAAATTACAAAATTAGCC
                                                                                                                                                                                                                                                                                           TGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTT
                                                                                                                                                                                                                                                                                                                                                                    AAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                              GATGCAAAACAGCTCTCTATTGTGTACAGAAAGGGTAAATAATGCAAAATACCTGGTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGACGCCTCATGTATTTTTATAGAGTCAACTATTTCCTCTTTATTTTCCCTCATTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTCCCGAAGGTGGAACATGCTTCATGGTCACACATACAGGCACAAAAACAGCATTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTCCCGAAGGIGGAACATGCTTCAIGGTCACACATACAGGCACAAAAAACAGCATTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTTTCCAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATACCTAGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTTCTACCAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAAAATGTATTCACATACAAATCTTCACATGGACACATGTTTTCATTTCCCTTGGATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCCTTGCAATCTGAACTTGGGTTTTTCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAATAGGATTTCACTCTTGGAAAAGTAGAGCTGTGTGGTCAAAATCAATATGAGAAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTTGGAAAGCCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCCAG
                                                                                                                                                                                                                                                                                                                                               AAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                           GATGCAAAACAGCTCTCTATTGTGTACAGAAAGGGTAAATAATGCAAAATACCTGGTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGACGCCTCATGTATTTTTATAGAGTCAACTATTTCCTCTTTATTTTCCCTCATTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAAATGTATTCACATACAAATCTTCACATGGACACATGTTTTCATTTCCCTTGGATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCCTTGCAATCTGAACTTGGGTTTTCCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAATAGGATTTCACTCTTGGAAAAGTAGAGCTGTGTGGTCAAAATCAATATGAGAAAGCT
                                                                                                                                                                                               CGAGTCCAGCCTGGCCAATATGCTGAAACCCTGTCTCTACTAAAATTACAAAAATTAGCC
                                                                                                                                                                                                                                                                       TGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATACCTAGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTTCTACCAATCT
                                                                                 2820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2160
                                                                                                                      2760
                                                                                                                                                                                               2700
                                                                                                                                                                                                                                  2700
                                                                                                                                                                                                                                                                       2640
                                                                                                                                                                                                                                                                                                            2640
                                                                                                                                                                                                                                                                                                                                                   2580
                                                                                                                                                                                                                                                                                                                                                                                      2580
                                                                                                                                                                                                                                                                                                                                                                                                                           2520
                                                                                                                                                                                                                                                                                                                                                                                                                                                             2520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1860
```

음 성

음 중 음

8 8 8 8 8 8

중 유

ঠ 🔓 ঠ

밁

음 성 음

중 유

\$

8 8 8 8 8

```
AX338549
LOCUS
DEFINITION
ACCESSION
VERSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
                श्
                                               밁
                                                                     S
                                                                                                           밁
                                                                                                                                    ð
                                                                                                                                                                   당
                                                                                                                                                                                                   S
                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                   $
                                                                                                                                                                                                                                                                                            F
                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                     맑
                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 2859; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             peptide
                  361
                                                 301
                                                                            301
                                                                                                             241
                                                                                                                                                                            181
                                                                                                                                                                                                         181
                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                        13
                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                      μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2859 bp
Sequence 1 from Patent WO0185790.
AX338549
AX338549.1 GI:18128949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chirica, M., Kastelein, R.A., Moore, K.W. and Parham, Mammalian receptor proteins; related reagents and Patent: WO 0.18579-A 1 15-NOV-2001; SCHERING CORPORATION (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               unclassified
                                                                                                                                                                                                                                                           GAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGGTG
                                                                                                                                                                                                                                                                                                      TAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTACTG
                                                                                                           TCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACAAT
                                                                                                                                                                                                                                                                                                                                                                      GTGGTACGGGAATTCCATTGTGTTGGGCAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGT
                                                                                                                                                                                                                                                                                                                                                                                         GTGGTACGGGAATTCCATTGTGTTGGGCAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGT
                                               AAGGAAACTTCATTTTATAAAAATGGCATCAAAGAAAGATTTCAAATCACAAGGATTAA
                                                                                                                                                                                                                                          GAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCCTTTACATACTCTTCAGCTGGTG
                                                                                                                                                                             TCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 2857.4; llarity 100.0%; Pred. No. 0; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /proceIn_id="Cad20540.1"
//proceIn_id="Cad20540.1"
//db_xref="GI:18128950"
//translation="MIXVTIQMDAVIALYILFSWCHGGITNINCSGHIWVEPATIFKM
//translation="MIXVTIQMDAVIALYILFSWCHGGITNINCSGHIWVEPATIFKM
//translation="MIXVTIQMDAVIALYILFSWCHGGITNINCSGHIWVEPATIFKM
//translation="MIXVTIQMDAVIALYILFSWCHGGITNINCSGHIPDIXVV
ACCPKHFQETLICGKDISSGYPPDIPDEVTCVIYEYSGNWTCTWNAXKLTYIDTXXVV
HVKSLETEERQQYLTSSYINISTDSLQGGKXYLWVQAAALGHEESKQLQIHLDDIV
IPSAAVISRATINATVPKTIIYWDSGTIIEKYSCEMAYKATHOTWNVKEPDTWNYS
VQQSEPYLEPNIKVYFQVRCQEFGKXYMQPWS5PPFKTPETVPQVTSKAAQHDTWNS
GLTVASISTGHLTSDNRGDIGLLLGMIVPAVHLSILSHJIFNISFRTGIKRRILLLI
PKWLYEDIPNKUSNVVKMLQENSELMNNUSSGVLYVDPMITEIKEIPEHKPTDY
KKENTGPLETRBLYDQNSIFDMTTVYYIPDLWTGYKPQISHFLPRSHLSNNEITELT
LKPPVDSLDSGNNPRLQKHPNFAPSVSSVNSLSNTIFLGELSLILNQGECSSPDIQNS
VEERTTMLLENDSPSETIPEQTLLPDEFVSCLGIVNEELPSINTYFPQNILESHFNRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                188.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SLLEK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
/note="primate; surmised Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                188. .2005
/product="unnamed"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        genetic code"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="unnamed protein product; Xaa translations
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      119. .2008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   멂
                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2
                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       depend
                                                 360
                     420
                                                                                 360
                                                                                                                300
                                                                                                                                                                                                             240
                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                        6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
```

2461 GATGCAAAACAGCTCTCTATTGTGTACAGAAAGGGTAAATAATGCAAAATACCTGGTAGT 2521 AAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTTGGT	50 50	1381 1441 1441	5
2401 GGACGCCTCATGTATTTTTATAGAGTCAACTATTTCCTCTTATTTTCCCTCATTGAAA 2461 GATGCAAAACAGCTCTCTATTGTTGTACAGAAAGGGTAAATAATGCAAAAATACCTGGTAGT	GCAATGTTGTGAAATGCTACAGGAAAATAGTGAACTTATO 	1321 1321 1381	8
2341 GGTCCCGAAGGTGGAACARGCTTCATGGTCACACATACAGCACCAAAAACACCATTATGT	GAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATTCC 1320	1261 AACTGGGA 1261 AACTGGGA	유 성
2281 CTCCATGCCTTTTAATTTAGCCATTCTTCTGCCTMATTTCTTAAAATTAGAGAATTAA	OY	1201 CGTCTTTG 1201 CGTCTTTG	음 성
2221 TGTTTCCAGAGTAGTGACATTIC TGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAG 2221 TGTTTCCAGAGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAG	CY SCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATGAT 1200	1141 CTCTACAGG	음 성
2161 AFACCTAGGTAGGGATTGCTGGGCCATATGAFACACATATGTTLAGGTLCTACCAATCT 2161 ATACCTAGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTTCTACCAATCT 2161 ATACCTAGGTAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTACCAATCT 2161 ATACCTAGGTAGGGGATTGCTGCTGCTGAGAACATGTTTCAGTACCAATCTCTACCAATCT	GCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCCAT 1140	1081 GGTCACATCAAAA 1081 GGTCACATCAAAA	유 왕
2101 AAAAAATGTATTCACATACAAATCTTCACATGGACACATGTTTTCATTTCCCTTGGATAA	CAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCA 1080	1021 AAGGTACTGG 1021 AAGGTACTGG	유 성
2011 CCCTTGCAATCIGGACTITTCACATACACACACACACATTTCACATACACACAC	CTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAA 1020	961 ATTCTA 961 ATTCTA	유 성
1961 CARLAGGALI I CACL CLI GGAAAAG I AGAGCI IS ILGGI CAMAAI CAALAGGACI I IIII III III III III III III III I	CTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGA 960	901 AAACCAAA 901 AAACCAAA	유 ઇ
1921 GAALGAGGGGILG-CAICLAILAGAGCCACTA 1921 GAALGAGGGAGTIGCCAICLAILAGAGAGCCACTT 1921 GAATGAGGAGTIGCCAICTATTAATACTTATTTTCCACAAAAATATTTTTGGAAAGCCACTT 1921 GAATGAGGAGTTGCCACTATTAATACTTATTTTCCACAAAATATTTTTTGGAAAGCCACTT	GTCAAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACAAC 900 . Db	841 TTGGGATA 841 TTGGGATA	유 성
	ICCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATTTA 840	781 TGCAGCCGTCATT	음 성
	AGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCTTC 780	721 ACTAGGCATGGAAA 721 ACTAGGCATGGAAA	음 성
1801 TGACATAGAAAACTCTAGGAGAGGAGGAGGAGGAGGAGGAGGAGTGTTTTTTTT	CTCCACTGATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAACGC 720	661 661	음 성
1681 TCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGTGTAGAATTCACTAAG	GTTTAGAGACAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAACAT 660	601 TGTGAAGA 601 TGTGAAGA	음 성
	CATGACTIGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTACA 600	541 541	음 성
	TGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGCAA 540	481 481	음 성
	CACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCTTC 480	421 421	음 ઇ
1501 AGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGT	TAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTACTG 420 Qy	361	밁

```
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 5
AF461422
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              음 衫
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                       gene
                                                                                                                                                                                                                                  SdD
                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Moore,K.W.
A receptor for the heterodimeric cytokine IL-23 is composed IL-12Rbetal and a novel cytokine receptor subunit, IL-23R J. Immunol. 168 (11), 5699-5708 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              l (bases 1 to 2826)

Parkam, C., Chirica, M., Timans, J., Vaisberg, E., Travis, M.,

Parham, C., Eflanz, S., Zhang, R., Singh, K.P., Vega, F., To, W.,

Cheung, J., Pflanz, S., Zhang, R., Singh, K.P., Vega, F., To, W.,

Wagner, J., O'Farrell, A.-M., McClanahan, T., Zurawski, S., Hannum, C.,

Wagner, D., Rennick, D.M., Kastelein, R.A., de Waal Malefyt, R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens interleukin-23
AF461422
AF461422.1 GI:21239251
                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (19-DEC-2001) Immunology, Ave., Palo Alto, CA 94304, USA Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Parham, C., Chirica, M., Timans, J., Vaisberg, E., Travis, M., Cheung, J., Pflanz, S., Zhang, R., Singh, K.P., Vega, F., To, W., Gcheung, J., Pflanz, S., Annum, Cheung, J., Prarell, A. - M., McClanahan, T., Zurawski, S., Hannum, Gorman, D., Rennick, D.M., Kastelein, R.A., de Waal Malefyt, R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Direct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Moore, K. W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AF461422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCAACAAGAGCAAAACTCTGTCTGGAAAAAAAAAAAAA 2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGAACCAGGAAGGCAGAAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGAGTCCAGCCTGGCCAATATGCTGAAAACCCTGTCTCTACTAAAATTACAAAAATTAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGAGTCCAGCCTGGCCAATATGCTGAAACCCTGTCTCTACTAAAATTACAAAAATTAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (bases 1 to 2826)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submission
/product="interleukin-23 receptor"
/protein_id="AAM44229.1"
/protein_id="AAM44229.1"
/db_xref="Gl:21239252"
/translation="MNQVTIQWDAVIALYILFSWCHGGITNINCSGHIWVBPATIFKM
/translation="MNQVTIQWDAVIALYILFSWCHGGITNINCYKNFLEPHASNYCT
AECPKHPQETLICGKDISSGYPDDIPDEVTCYIEYSGMWTCTWNAGKLTYIDTKYV
HVKSLETEEEQQYLTSSYINISTDSLQGKKYLVWVQAANALGMESKQLQHHLDDIV
IPSAAVISRAETINATVPKTIIYWDSQTTIEKVSCEMRYKATTNQTWNVKEFDTNPTY
                                                                                                                                                                   codon_start=1
                                                                                                                                                                                       /gene="IL-23R"
/note="hemopoietic cytokine receptor"
                                                                                                                                                                                                                                                   /gene="IL-23R"
                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol type="mRNA"
/db_xref="taxon:9606"
/chromosome="1"
                                                                                                                                                                                                                                                                                          map="1p31.2-1p32.1"
                                                                                                                                                                                                                                  .1975
                                                                                                                                                                                                                                                                             . 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6 bp mRNA linear
receptor (IL-23R) mRNA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNAX Research,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                901 California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          complete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRI 29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              얁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2700
                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Match
                         841 CTGTGAAATGAGATACAAGGCTACAACAAACCAAACTTGGAATGTTAAAGAATTTGACAC
```

VQQSEFYLEPNIKYVPQVRCQETGKRYWQPWSSPFFHKTPETVPQVTSKAFQHDTWNS GLTVASISTGHLTSDNRGDIGLLCHIVPAVHLSILGIENRSFRTGIKRRILLLI PKWLYEDIPNKUSHVKHGLIGLLCHIVPAVHLSILGIENRSFRTGIKRRILLLI KKENTGPLETEDYPQNSVKHGLESELMNNSGSVLYDDHITEIKEIF PEHKPTDY KKENTGPLETEDYPQNSVKHGHTVYXIPDLATGSYKPQISNFLPEGSHLSNNNEITSLT LKPPVDSLDSGNNPRLQKHPNFAFSVSSVNSISNTIFLGELSLILNQGECSSPDIQNS VESETTMLLENDSPSETIPEGTLLPDEFVSCLGIVNEELPSINTYFPQNILESHFNRI

900	CTGTGAAATGAGATACAAGGCTACAACAAACCTTGGAATGTTAAAAGAATTTGACAC	Db 841	п
933		Qy 874	_
840	TGCTACAGTGCCCAAGACCATAATTTATTGGGATAGTCAAACAACAATTGAAAAAGGTTTC	Db 781	_
873	−n	Оу 814	_
780	CCTGGATGATATAGTGATACCTTCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAA	Db 721	_
813	TCACCTGGATGATATAGTGATACCTTCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAA	Qy 754	_
720		Db 661	п
753	CTTGGTTTGGGTCCAAGCAAACGAACGCACTAGGCATGGAAGAGTCAAAACAACTGCAAAT	Qy 694	0
660	GTATCTCACCTCAAGCTATATTAACATCTCCACTGATTCATTACAAGGTGGCAAGAAGTA	Db 601	н
693		Qy 634	0
600	р-	Db 541	н
633	CTACATAGACACAAAATACGTGGTACATGTGAAGAGTTTAGAGACACAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAA	Qy 574	0
540	CTGTGTCATTTATGAATATTCAGGCAACATGACTTGCACCTGGAATGCTGGGAAGCTCAC	Db 481	н
573		Qy 514	0
480	CTGATATGTGGAAAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGAAGTAAC	Db 421	н
513	-ი	Qy 454	n
420	TCTGGAACCACATGCTTCTATGTACTGCACTGCTGAATGTCCCCAAACATTTTCAAGAGAC	Db 361	м
453		Qy 394	0
360	AGAAAGATTTCAAATCACAAGGATTAATAAAACAACAGCTCGGCTTTGGTATAAAAACTT	Db 301	ы
393		Qy 334	
300	CCAAGCAGCAATTAAGAACTGCCAACCAAGGAAACTTCATTTTTATAAAAATGGCATCAA	Db 241	ы
333	CAAGCAGCAATTAAGAACTGCCAACCAAGGAAACTTCATTTTTATAAAAATGGCATCAA	Оу 274	0
240	CCACATCTGGGTAGAACCAGCCACAATTTTTAAGATGGGTATGAATATCTCTATATATTG	Db 181	н
273	CACATCTGGGTAGAACCAGCCACAATTTTTTAAGATGGGTATGAATATCTCTATATATTG	Qy 214	0
180	AGCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATATAAACTGCTCTGG	Db 121	-
213		0у 154	0
120	AAACAGTCTTTTCCTGCTTCCAGACATGAATCAGGTCACTATTCAATGGGATGCAGTAAT	Db 61	н
153		Оу 94	0
60	ACAAGGGTGGCAGCCTGAAGTGGAATTATGTGCTTCAAACAGGTTGAAAGAGGG	Db 1	ы
93		Qу 34	0
0,	Conservative	Matches 2822	
	98.8%; Score 2824	Query Match	

1834 CATGCTTTTGGAAAATGATTCACCCAGTGAAACTATTCCAGAACAGACCCTGCTTCCTGA 1893 [CANTITIACATRITIGGAACAGTCAGAARTCTTACTTIGGAGCCAAACATTTAAGTACGTATT (TCAAGTGAGATGTCAAGAAACAGGCAAAAGGTACTGGAGCCAAACATTTAAGTACGTATT (TCAAGTGAGATGTCAAGAAACAGGCAAAAGGTACTGGAGCCTTGGAGTTCACCGTTTT (TCAAGTGAGATGTCAAGAAACAGGCAAAAGGTACTGGAGCCTTGGAGTTCACCGTTTTT (TCATAAACACCTGAAACAGTTCCCCAGGTCACATCGAAAAGCATTCCAACATGACACTGT (TCATAAAACACCTGAAACAGTTCCCCAGGTCACATCAAAAGCATTCCAACATGACACTGT (TCATAAACACCTGAAACAGTTCCCCAGGTCACATCAAAAGCATTCCAACATGACACTGT (TCATAAAACACCTGAAACAGTTCCCCAGGTCACATCAAAAGCATTCCAACATGACACTGT (TCATAAACACCTGAACAGTTCCCCAGGTCACATCAAAAGCATTCCAACATGACACTGT (TCATAAAACACCTGAACAGTTCCCTACTCCAACTCCACAGGCACCTTACTTCTCAACATGACACATGT (TCATAAACACCTTTAATGGGAATGATCCCCACATCCACAGGCACCTTACTTCTCAACATGACACATGT (TCATAAACACCTTTAATGGGAATGATCCCCAACTTCCACAGGCACCTTACTTCTTACTTTTTT (TCATAAACACCTTTAATGGGAATGATCCCTACATGCTTTATGTTGTTAATTCTTTTTT (TCATAAACACCTTTAACAGATTTTCCGAATGATCCTTTTCCTTTTCTTTTTT (TCATAAACACCTTTAACAGATTTTCCGAATGTCCTTACAGGAACCATTCCTTTCTTT
RESULT 6 AX467349 LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE	
AX467349 AX467349 AX467349 AX467349 AX467349 AX467349.1 GI:21900586 AX67349.1 GI:21900586 Edwaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Eutarchontoglires; Primates; Catarrhini; Hominidae; Homo.	1981 TETGGTCAMARTCATATGAGAMAGGTGCCTGCAMACTGGATCTGGATCTGGATCTGCAMCTTGGATCTGCAMCTTGGATCTGCAMCTTGGATCTGCAMCTTGGATCTGCAMCTTGGATCTGCAMCTTGGATCTTCCCTGGATCAMACTGGATCTTCCACTTGCAMCTTGCCTTGC

8 8 8 8 8 8 8 8 8 8 8 8

Oy 688 GAAGTACTTGGTTTGGGTCCAAGCAGCATAGGCATGGAAGAGTCAAAACAACT 747 Db 676 GANGTACTTGGTTTGGGTCCAAGCAGCACTAAGCAATGGAAGAGTCAAAACAACT 747 Db 676 GAAGTACTTGGTTTGGGTCCAAGCAGAACTAGCACTAGGCATGGAAGAGTCAAAACAACT 735 Oy 748 GCAAATTCACCTGGATGATATAGTGATACCTTCTGCAGCCGTCATTTCCAGGGCTGAAAACAACT 795 Db 736 GCAAATTCACCTGGATGATATAGTGATAACTTCTGCAGCCGTCATTTCCAGGGCTGAGAC 795 Oy 808 TATAAATGCTACAGTGCCCAAGACCATAATTTATTGGGATAGTCAAACAACAATTGAAAA 867	56 28 16	B AGAGACACTGATATGTGGAAAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGA	316 CATCAAAGAAAGATTTCAAATCACAAGGATTAATAAAACAACAGCTCGGCTTTGGTATAA 388 AAACTTTCTGGAACCACATGCTTCTATGTACTGCACTGC	Db 196 CTCTGGCCACATCTGGGTAGAACCAGCCACAATTTTAAGATGGGTATGAATATCTCTAT 255 Oy 268 ATATTGCCAAGCAGCAATTAAGAACTGCCAACCAAGGAAACTTCATTTTATAAAAAATGG 327	148 AGTAATAGCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATATAAACTG	Qy 28 CAGCCAACAAGGTGGCAGCCTGGCTCTGAAGTGGAATTATGTGCTTCAAACAGGTTGAA 87	Oxigin Query Match 98.3%; Score 2810.2; DB 2; Length 2830; Best Local Similarity 99.8%; Pred. No. 0; Matches 2809; Conservative 4; Mismatches 2; Indels 0; Gaps 0.	ource	AUTHORS Cosman,D.J., Mosley,B.A., Bird,T.A., Dubose,R.F. and Wiley,S.R. TITLE Hematopoietin receptors hpr1 and hpr2 JOURNAL Patent: WO 0229060-A 19 11-APR-2002; Immunex CorporatioN (US) FEATURES Immunex CorporatioN (US)
B & B & B & B	Q	Q	Q B Q B	Q dd QQ	9 Q B Q	D	Q D Qy	Db Qy	Oy Db
	1636 ACCACCAGTIGATICCTTAGACTCAGGAAATAATCACCCAGGTTACAAAAGCATCCTAATTT 1695 1708 TGCTTTTTCTGTTTCAAGTGTGAATCACTAAGCAACACAATATTTCTTGGAGAATTAAG 1767	CAATACTACAGTTGTATATATTCCTGATCTCAACACTGGATATAAACCCCAAATTTCAAC TTTTCTGCCTGAGGGAAGCCCATCTCAGCAATAATAATGGAATTACTTCCTTAACACTTAA TTTTCTGCCTGAGGGAAGCCCATCTCAGCAATAATAATGAAATTACTTCCTTAACACTTAA TTTTCTGCCTGAGGGAAAGCCATCTCAGGAAATAATGAAATTACTTCCTTAACACTTAA ACCACCAGTTGATTCCTTAGACTCAGGAAATAATCCCCAGGTTACAAAAGGATCCTAATTT	1396 TGÁTCCCÁTGATTACAGAGATAAAAGAÁATCTTCATCCAGAACACAAAGCCTACAGACTA 1455 1468 CAAGAAGGAGATACAGACCCCTOGAGACAAGACTCCCCCAAAACTCCGCTATTCGA 1527	1348 AATGCTACAGGAAAATAGTGAACTTATGAATAATAATTACCAGTGAGCAGGTCCTATATGT 1407	1228 TICHTIGATIGAATATTAACAGATCATICCGAACTGGGATTAAAAGAAGAATCTTATT 1287 1216 TICTTIGATTGGGATATTTAACAGATCATTCCGAACTGGGATTAAAAGAAGGATCTTATT 1275 1216 TICTTIGATTGGGATATTTAACAGATCATTCCGAACTGGGATTAAAAGAAGGATCTTATT 1275 1288 GTTAATACCAAAGTGGCTTTATGAAGATATTCCCTAATATGAAAAAACAGCAATGTTGTGAA 1347 1276 GTTAATACCAAAGTGGCTTTATGAAGATATTCCTAATATGAAAAACAGCAATGTTGTGAA 1335		1048 GTTTTTTCATAAAACACCTGAAAACAGTTCCCCAGGTCACATGAAAAGCATTCCAACATGA 1107	988 CGTATTTCAAGTGAGATGTCAAGAAACAGGCAAAAAGGTACTGGCAGCCTTGGAGTTCACC 1047	856 GGTTTCCTGTGAAATGAGATACAAGGCTACAACAAACCAAACTTGGAATGTTAAAGAATT 915 928 TGACACCAATTTTACATATGTGCAACAGTCAGAACTTCTACTTGGAGCCAAACATTAAGTA 987

PC

```
REFERENCE
AUTHORS
TITLE
                                                         RESULT 7
BD013243
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                 8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                ð
                                                                                                                                                                                                 음 성
                                                                                                                                                                                                                                        음 성 음 성
                                                                                                                                                                                                                                                                                                                      음 성 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 음 성 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                       2596
                                                                                                                                                                                                                                                                                                                                                                                                          2416
                                                                                                                                                                                                                                                                                                                                                                                                                             2428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2176
                                                                                                                                                                   2776
                                                                                                                                                                                                                            2728
                                                                                                                                                                                                                                                 2656
                                                                                                                                                                                                                                                                                                           2608
                                                                                                                                                                                                                                                                                                                             2536
                                                                                                                                                                                                                                                                                                                                                2548
                                                                                                                                                                                                                                                                                                                                                                    2476
                                                                                                                                                                                                                                                                                                                                                                                       2488
                                                                                                                                                                                                                                                                                                                                                                                                                                                 2356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2056
                                                                                                                                                                                                                                                                   2668
                                                                       2123 bp
Novel hemopoietin receptor protein,
BD013243
BD013243.1 GI:22093432
WO 0123556-A/3.
1 (bases 1 to 2123)
Maeda,M. and Yaguchi,N.
Novel hemopoietin receptor protein,
                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                        Homo sapiens (human)
                             Hominidae; Homo.
                                                                                                                                                                  CAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCAGGAAGGCAGAGGTTGCACT
                                                                                                                                                                                                                                                ACCCTGTCTCTACTAAAATTACAAAAATTAGCCGGCCATGGTGGCAGGTGCTTGTAATCC
                                                                                                                                                                                                                                                                                       AAATAGAATCATTAGGCCAGGCGTGGTGGCTCATGCTTGTAATCCCAGCACTTTGGTAGG
                                                                                                                                                                                                                                                                                                                                                                   CAACTATTTCCTCTTTATTTTCCCTCATTGAAAGATGCAAAACAGCTCTCTATTGTGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                     CAACTATTTCCTCTTTATTTTCCCTCATTGAAAGATGCAAAACAGCTCTCTATTGTGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTCACACATACAGGCACAAAAACAGCATTATGTGGACGCCTCATGTATTTTTTATAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTCACACATACAGGCACAAAAACAGCATTATGTGGACGCCTCATGTATTTTTTATAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTCTGCCTMATTTCTTAAAATTAAGAGAATTAAGGTCCCGAAGGTGGAACATGCTTCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCCTACCATCACCATGTAAGAATTCCCGGGAGCTCCATGCCTTTTTAATTTTAGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCCTACCATCACCATGTAAGAATTCCCGGGAGCTCCATGCCTTTTTAATTTTTAGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TATGATAAGCATATGTTTCAGTTCTACCAATCTTGTTTCCAGAGTAGTGACATTTCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATGATAAGCATATGTTTCAGTTCTACCAATCTTGTTTTCCAGAGTAGTGACATTTCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGCAATAGAAATTGAATTCTGCCTCTTTTTGAAAAAATGTATTCACATACAAATCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGCTGTGTGGTCAAAATCAATATGAGAAAGCTGCCTTGCAATCTGAACTTGGGTTTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTCTGCCTCATTTCTTAAAATTAGAGAATTAAGGTCCCGAAGGTGGAACATGCTTCATG
                                                                                                         DNA
, NR12.
  NR12
                                                                                                                   linear
                                                                                                                   PAT
                                                                                                                   02-AUG-2002
                                                                                                                                                                  2830
                                                                                                                                                                                      2842
                                                                                                                                                                                                                             2787
                                                                                                                                                                                                                                                 2715
                                                                                                                                                                                                                                                                                        2655
                                                                                                                                                                                                                                                                                                           2667
                                                                                                                                                                                                                                                                                                                                                 2607
                                                                                                                                                                                                                                                                                                                                                                                       2547
                                                                                                                                                                                                                                                                                                                                                                                                           2475
                                                                                                                                                                                                                                                                                                                                                                                                                                                 2415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2067
                                                                                                                                                                                                           2775
                                                                                                                                                                                                                                                                   2727
                                                                                                                                                                                                                                                                                                                              2595
                                                                                                                                                                                                                                                                                                                                                                    2535
                                                                                                                                                                                                                                                                                                                                                                                                                             2487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2055
                       5
                                               멍
                                                             ક
                                                                                      밁
                                                                                                    ð
                                                                                                                           밁
                                                                                                                                         ર્ક
                                                                                                                                                            밁
                                                                                                                                                                                 ð
                                                                                                                                                                                                         밁
                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                         ð
           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 2085; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       L Patent: WO 012356-A 3 05-APR-2001;
CHUCAI RESEARCH INSTITUTE FOR MOLECULAR MEDICINE INC, ASPMAEDA, NORIKO YAGUCHI
OS Homo sapiens (human)
PN WO 012356-A/3
PD 05-APR-2001
PF 27-SEP-2000 WO 2000JP006654
PF 27-SEP-2000 WO 2000JP006654
PR 27-SEP-1999 JP 99P 273358,03-AUG-2000 JP 00P
MASATSUGU MAEDA,NORIKO YAGUCHI
PC C12N15/12,C12N1/21,C12N5/10,C07K14/715,C07K16/28,C12
CC
FH Key Location/Qualifiers
FT CDS (98) (1984)
                                                                                                                                                                427
                                                                                      547
                                                                                                         568
                                                                                                                             487
                                                                                                                                                808
                                                                                                                                                                                      448
                                                                                                                                                                                                          367
                                                                                                                                                                                                                                                 307
                                                                                                                                                                                                                                                                                       247
            667
                             688
                                                 607
                                                                   628
                                                                                                                                                                                                                             388
                                                                                                                                                                                                                                                                   328
                                                                                                                                                                                                                                                                                                           268
                                                                                                                                                                                                                                                                                                                              187
                                                                                                                                                                                                                                                                                                                                                208
                                                                                                                                                                                                                                                                                                                                                                    127
                                                                                                                                                                                                                                                                                                                                                                                       148
                                                                                                                                                                                                                                                                                                                                                                                                           67
                                                                                                                                                                                                                                                                                                                                                                                                                               88
                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGTAATAGCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATATAAACTG
           GAAGTACTTGGTT
                    GAAGTACTTGGTTTGGGTCCAAGCAGCAAACGCACTAGGCATGGAAGAGTCAAAACAACT
                                                 GCAACAGTATCTCACCTCAAGCTATATTAACATCTCCACTGATTCATTACAAGGTGGCAA
                                                                                      AGAGACACTGATATGTGGAAAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGA
                                                                                                                                                                                                          CATCAAAGAAGATTTCAAATCACAAGGATTAATAAAACAACAGCTCGGCTTTGGTATAA
                                                                                                                                                                                                                                                             CATCAAAGAAAGATTTCAAATCACAAGGATTAATAAAACAACAGCTCGGCTTTGGTATAA
                                                                                                                                                                                                                                                                                       ATATTGCCAAGCAGCAATTAAGAACTGCCAACGAAACTTCATTTTATAAAAATGG
                                                                                                                                                                                                                                                                                                                              CTCTGGCCACATCTGGGTAGAACCAGCCACAATTTTTAAGATGGGTATGAATATCTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                    AGAGGGAAACAGTCTTTTCCTGCTTCCAGACATGAATCAKGTCACTATTCAATGGGATGC
                                                                                                                                                                                                                     AGAGGGAAACAGTCTTTTCCTGCTTCCAGACATGAATCAGGTCACTATTCAATGGGATGC
                                                                                                                                                                   AGAGACACTGATATGTGGAAAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers (98)..(1984).
Location/Qualifiers
1..2123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .2123
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 72.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 2081.4;
Pred. No. 0;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ASATSUGU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C12P21/02,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PI
```

147 126 207

87 66

186

726

```
1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1108
                                                                                                                                    1627
                                                                                                                                                              1648
                                                                                                                                                                                                                  1588
                                                                                                                                                                                                                                              1507
                                                                                                                                                                                                                                                                                                     1447
                                                                                                                                                                                                                                                                                                                                1468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGACACCAATTTTACATATGTGCAACAGTCAGAATTCTACTTGGAGCCAAACATTAAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGTATTTCAAGTGAGATGTCAAGAAACAGGCAAAAGGTACTGGCAGCCTTGGAGTTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGTTTCCTGTGAAATGAGATACAAGGCTACAACAAACCAAACTTGGAATGTTAAAGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TATAAATGCTACAGTGCCCAAGACCATAATTTATTGGGATAGTCAAACAACAATTGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTCATATTAAATCAAGGAGAATGCAGTTCTCCCTGACATACAAAACTCAGTAGAGGAGGA
                                                                             TGCTTTTTCTGTTTCAAGTGTGAATTCACTAAGCAACACAATATTTCTTGGAGAATTAAG
                                                                                             TGCTTTTTCTGTTTCAAGTGTGAATTCACTAAGCAACACAATATTTCTTTGGAGAATTAAG
                                                                                                                                  TTTTCTGCCTGAGGGAAGCCATCTCAGCAATAATAATGAAATTACTTCCTTAACACTTAA
                                                                                                                                                                                                                                                              CAATACTACAGTTGTATATATTCCTGATCTCAACACTGGATATAAACCCCCAAATTTCAAA
                                                                                                                                                                                                                                                                                                    CAAGAAGGAGAATACAGGACCCCTGGAGACAAGAGACTACCCGCAAAACTCGCTATTCGA
                                                                                                                                                                                                                                                                                                                                                         GTTAATACCAAAGTGGCTTTATGAAGATATTCCTAATATGAAAAACAGCAATGTTGTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTTAATACCAAAGTGGCTTTATGAAGATATTCCTAATATGAAAAACAGCAATGTTGTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTCTTTGATTGGGACATTTAACAGATCATTCCGAACTGGGATTAAAAGAAGGATCTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCTTTGATTGGGATATTTAACAGATCATTCCGAACTGGGATTAAAAGAAGGATCTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTTTTTTCATAAAACACCTGAAACAGTTCCCCCAGGTCACATCAAAAGCATTCCAACATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTTTTTCATAAAACACCTGAAACAGTTCCCCAGGTCACATCAAAAGCATTCCAACATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGTATTTCAAGTGAGATGTCAAGAAACAGGCAAAAGGTACTGGCAGCCTTGGAGTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGACACCAATTTTACATATGTGCAACAGTCAGAATTCTACTTGGAGCCAAACATTAAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGTTTCCTGTGAAATGAGATACAAGGCTACAACAAACCAAACTTGGAATGTTAAAGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TATAAATGCTACAGTGCCCAAGACCATAATTTATTGGGATAGTCAAACAACAATTGAAAA
AACCACCATGCTTTTGGAAAATGATTCACCCAGTGAAACTATTCCAGAACAGACCCTGCT
                                                                                                                                                                                                                                                CAATACTACAGTTGTATATTCCTGATCTCAACACTGGATATAAACCCCCAAATTTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1167
                                                   1827
                                                                             1746
                                                                                                         1767
                                                                                                                                    1686
                                                                                                                                                              1707
                                                                                                                                                                                         1626
                                                                                                                                                                                                                   1647
                                                                                                                                                                                                                                                1566
                                                                                                                                                                                                                                                                        1587
                                                                                                                                                                                                                                                                                                     1506
                                                                                                                                                                                                                                                                                                                                1527
                                                                                                                                                                                                                                                                                                                                                          1446
                                                                                                                                                                                                                                                                                                                                                                                      1467
                                                                                                                                                                                                                                                                                                                                                                                                                 1386
                                                                                                                                                                                                                                                                                                                                                                                                                                           1407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                867
                         1806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     807
```

음 성 음

ક

음 성 음

중 유

₹ ₽

रु है रु

유성

음 성

음 성 음

ঠ

음 성 음

8 8 8 8

ঠ 🖁 ঠ

음 성 음

```
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 8
BD013245
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
Ś
                           B
                                                  ঠ
                                                                             문
                                                                                                              8
                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                        Query Match
Best Local Sin
Matches 1906;
                                                                                                                                                                                                                                                                                                                         Bource
                                                                                                                                                                                                                                                                                                                                                                                          Hominidae; Homo.

It (bases 1 to 1910)

RS Maeda, M. and Yaguchi, N.

Patent: WO 0123556-A, 5 05-APR-2001;

CHUGAI RESEARCH INSTITUTE FOR MOLECULAR MEDICINE INC, ASATSUGU MAEDA, NORIKO YAGUCHI

OS Homo sapiens (human)

PN WO 0123556-A/5

PD WO 0123556-A/5

PD 05-APR-2001

PF 27-SEP-2000 WO 2000JP006654

PF 27-SEP-2000 WO 2000JP006654

PF 27-SEP-1999 JP 99P 273358, 03-AUG-2000 JP 00P 240397 PI

MASATSUGU MAEDA,NORIKO YAGUCHI

PC C12N15/12, C12N1/21, C12N5/10, C07K14/715, C07K16/28, C12P21/02, PC

G01N33/567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1807
                                                                                                                    179
                               121
                                                                                                                                                                            119
                                                                                       61
                                                                                                                                                 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel hemopoletin receptor pr
BD013245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                      급표당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BD013245.1 GI:22093434
WO 0123556-A/5.
                                                                                                                                                                                                                     Similarity
                                                                                       AACCACCATGCTTTTGGAAAATGATTCACCCAGTGAAACTATTCCAGAACAGACCCTGCT
                                              ATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAACTAAGAACTGCCAA
                                                                                                                                               ATGAATCAGGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG
                                                                                                                                                                ATGAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGCAATAGAAATTGAATTCTGCCTCTTTTTGAAAAAATGTATTCACATACAAA 2122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGCTGTGTGGTCAAAATCAATATGAGAAAGCTGCCTTGCAATCTGAACTTGGGTTTTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTATTITCCACAAAATATTTTGGAAAGCCACTTCAATAGGATTTCACTCTTGGAAAAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCTGATGAATTTGTCTCCTGTTTGGGGATCGTGAATGAGGAGTTGCCATCTATTAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCTGATGAATTTGTCTCCTGTTTGGGGATCGTGAATGAGGAGTTGCCATCTATTAATAC
   CTGCAATAGAAATTGAATTCTGCCTCTTTTTGAAAAAATGTATTCACATCCCAA 2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGCTGTGTGGTCAAAATCAATATGAGAAAGCTGCCTTGCAATCTGAACTTGGGTTTTCC
                               ATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                      CDS
                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers (1). (1887). Location/Qualifiers
                                                                                                                                                                                                                                                                          1. .1910
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                    99.8%;
                                                                                                                                                                                                      ; Score 1906; D
; Pred. No. O;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      å
                                                                                                                                                                                                                                    DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
, NR12.
                                                                                                                                                                                                                                    2
                                                                                                                                                                                                         2
                                                                                                                                                                                                                                    Length 1910;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 02-AUG-2002
                                                                                                                                                                                                         0
                                                                                                                                                                                                         Gaps
                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1866
    358
                                 180
                                                                                                                      238
                                                                                                                                                   60
                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

```
1259
                                                                                                                                                1021
                                                                                                                                                                  1139
                                                                                                                                                                                                                                              1019
                                                                                                                                                                                                        1079
                                                                                                                                                                                                                           901
                                                                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                     961
                                                                                                                                                                                                                                                                                   959
                                                                                                                                                                                                                                                                                                                           899
                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                        779
                                                                                                                                                                                                                                                                                                                                                                                                                           109
                                                                                                                                                                                                                                                                                                                                                                                                                                             719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                 AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                             CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                    CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                             CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                         ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                     AAAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                                    AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                                                                                                       TATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                         TATTGGGATAGTCAAACAACAACTGAAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                     TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                                                               TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATGTGAAGAGTTTAGAGACAGAAGAAGAAGAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATGTGAAGAGTTTAGAGACAGAAGAAGAAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1200
                                                                                      1318
                                                                                                         1140
                                                                                                                            1258
                                                                                                                                               1080
                                                                                                                                                                  1198
                                                                                                                                                                                     1020
                                                                                                                                                                                                                                              1078
                                                                                                                                                                                                                                                                                     1018
                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.78
                              1260
                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                                                                                                                           958
                                                                                                                                                                                                                                                                                                                                                                  898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                      720
                                                                                                                                                                                                                                                                                                                                                                                                        838
                                                                                                                                                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                                                                                                                                              778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       538
```

중 음

문

S 밁 성 유

Ş В ક Дb 중 음 중

8 8 8 8

д S 밁 ঠ 유

S

8 8 8 8 8

경 유

성 음

S

119

Conservative

ATGAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG

1;

Indels

0

Gaps

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                   LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                  RESULT 9
AX467350
                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                            음 성
                                                                                                                                                                                                                                                                                                                                            망
                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                         밁
                                       ORIGIN
                                                                                   FEATURES
Query Match
Best Local Similarity
Matches 1887; Conserv
                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                         1861
                                                                                                                                                                                                                                                                                                                              1919
                                                                                                                                                                                                                                                                                                                                                 1741
                                                                                                                                                                                                                                                                                                                                                                                      1681
                                                                                                                                                                                                                                                                                                                                                                                                      1799
                                                                                                                                                                                                                                                                                                                                                                                                                         1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1261
                                                                                Cosman,D.J., Mosley,B.A., Bird,T.A., I
Hematopoietin receptors hpr1 and hpr2
Patent: WO 0229060-A 20 11-APR-2002;
Immunex CorporatioN (US)
Location/Qualifiers
                                                                                                                                                 Homo sapiens (human)
Homo sapiens
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                             AX467350
Sequence 20 from Patent
AX467350
AX467350.1 GI:21900587
                                                                                                                                         Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                                       TTCAATAGGATTTCACTCTTGGAAAAGTAGAGCTGTGTGGTCAAAATCAA 2028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTTGGAAAGCCAC
                                                                                                                                                                                                                                                                                                                        GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTTGGAAAGCCAC
                                                                                                                                                                                                                                                                                                                                                AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                    CCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                         AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                           1. .1890
           66.1%;
; Score 1887.6; pred. No. 0; 2; Mismatches
                                                                                                                                                                                                                  1890 bp
WO0229060.
                                                                                                                                                                                                                          DNA
                                                                                                                       Dubose, R.F.
                     밁
                     2;
                                                                                                                                                                                                                           linear
                    Length
                                                                                                                        and
                                                                                                                                                                                                                           PAT 16-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1498
                                                                                                                                                                                                                                                                                                              1860
                                                                                                                                                                                                                                                                                                                                                 1800
                                                                                                                                                                                                                                                                                                                                                                   1918
                                                                                                                                                                                                                                                                                                                                                                                       1740
                                                                                                                                                                                                                                                                                                                                                                                                        1858
                                                                                                                                                                                                                                                                                                                                                                                                                                             1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1320
                                                                                                                                                                                                                                                                                                                                                                                                                          1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1500
```

유

밁 8 ર્શ 밁 멍 ફ

959 GAATTCTACTTGGAGCCAAACATTAAGTACGTATTCAAGTGAGATGTCAAGAAACAGGC 1018	1 ATGANTCAGGTCACTATTCAATGGANTGCAGTAATAGCCCTTTACATACTCTCAGCCGCACACCAGCCACACCAC
RESULT 10 AY937250 LOCUS DEFINITION Homo sapiens interleukin 23 receptor isoform 1 mRNA, partial cds, alternatively spliced. ACCESSION AY937250.1 GI:62870698 KEYWORDS SOURCE ORGANISM Homo sapiens (human) ORGANISM Homo sapiens (human) ORGANISM Homo sapiens Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Hominidae; Homo. REFERENCE 1 (Dases 1 to 1779) AUTHORS Wang, S. H. and Liu, L. TITLE Identification and expression analysis of alternatively spliced isoforms of human interleukin-23 receptor gene in normal lymphoid cells and selected tumor cells	OY 1255 CCAACTGGGATTANAAGANGATCTTATTGTTANATCCAAAGTGGCTTTATTGAAAGTATT 1318 1311 CCTAATTANAAGANGATCTTATTGTTANATCCAAAGTGGCTTTATTGAAAGTATT 1318 1312 CCTAATTANAAGAAAGTGCTATTGTTANATCCAAAGTGGCTTATTGAAAGTTATT 1318 1313 CCTAATTANAAGAAAGTGCTATTGTTANATTGCAAAATTGCAAAATTCCATGAAT 1318 1314 CCTAATTANAAAAAAGCAAATTGTTGAAAATTGCAAAAATTCAAATTCAAATTCAAAATTCAAAATTCAAAATTCAAAATTCAAAATTCAAAATTCAAAATTCAAAATTCAAAAATTCAAAAATTCAAAAATTCAAAAATTCAAAAATTCAAAAATTCAAAAATTCAAAAATTCAAAAATTCAAAAATTCAAAAATTCCAAAATTCCAAAAATTCCAAAAATTCCAAAAATTCCAAAAATTCCAAAAATTCCAAAAATTCCAAAAATTCCAAAAATTCCAAAAATTCCAAAAATTCCAAAAATTCCAAAAATTCCAAAAATTCCAAAAAA

멍

B S 밁 밁

र्

8 8 8

문

र दे दे

음 중 음

ક 片 र् D र्

```
JOURNAL
PUBMED
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                         밁
                                       g
                                                                 중 유
                                                                                                                 δ
                                                                                                                                          음 성 음
                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                       ર્શ
                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                       밁
              ্হ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 99.
Matches 1775; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
481
                      707
                                               421
                                                                                                 361
                                                                                                                         587
                                                                                                                                                  301
                                                                                                                                                                           527
                                                                                                                                                                                                    241
                                                                                                                                                                                                                              467
                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                               407
                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                  347
                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Direct Submission
Submitted (16-FEB-2005) Microbiology and Etiology, Peking Union Submitted (16-FEB-2005) Microbiology and Etiology, Peking Union College, #5 Dong Dan San Tiao, Beijing 100005, China
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 (bases 1 to 1779)
Zhang, X.-Y., Zhang, Y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Immunogenetics
16372191
                                                                                                                                                                                                                                                                                                                                                                                                                         GAACCAGCCACAATTTTTAAGATGGGTATGAATATCTCTATATATTTGCCAAGCAGCAGCAATT
             CAAGCAGCAAACGCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGAT
                                                                                                              AAATACGTGGTACATGTGAAGAGTTTAGAGACAGAAGAAGAGAGCAACAGTATCTCACCTCA
                                                                                                                                                               GAATATTCAGGCAACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACA
                                                                                                                                                                                                   AMAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTAT
                                                                                                                                                                                                                  AAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTAT
                                                                                                                                                                                                                                                       GCTTCTATGTACTGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGA
                                                                                                                                                                                                                                                                    GCTTCTATGTACTGCACTGCATGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGA
                                                                                                                                                                                                                                                                                                          ATCACAAGGATTAATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACAT
                                                                                                                                                                                                                                                                                                                       ATCACAAGGATTAAATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACAT
                                                                                                                                                                                                                                                                                                                                                         AAGAACTGCCAACCAAGGAAACTCCATTTTTATAAAAAATGGCATCAAAGAAGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                            GAACCAGCCACAATTTTTAAGATGGGTATGAATATCTCTATATATTTGCCAAGCAACTA
CAAGCAGCAAACGCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGAT
                                                              AGCTATATTAACATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTC
                                                                                                  ANATACGTGGTACATGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCA
                                                                                                                                                   GAATATTCAGGCAACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       College, #5 Dong Dan
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /tranelation="Epatifkogmnisiycqaaikocqprklhfykngikerfqitri

KRTTARLMYKNFLEPHASMYCTARCFKHFQETLICGKDISGSYBDDIPDEVTCVIYEY

GRMTCTWNAGKLTYIDTKYVVHVKSLETEEBQQYLTSSYINISTDSLQGKKYLWW

QAANALGMESGKQLQHHLDDIVIPSAAVISRAETINATVPKTIIYMSGQTTEKVSCE

MRYKATTNQTWNVKEFDTNFTYVQQSEFYLEPNIKYVFQVRCQETGKRYWQPWSSPFF

HKTPETYPQVTSKAFQHDTWNSGLTVASISTCHLTSNDKRGDIGLLLGHVYNAGVMLSIL

SLIGIFNRSFRTGIKRRILLLIKUYSDIFTHSNDKTGNKGLENSELMNNNSSENSIL

SLIGIFNSFRTGIKRRILLIKUYSDIFTHSNDKNSNVTQENSELMNNNSSENTI

YVDPMITEIKEIFIBKRKTDYKKENTGPLETRDYPONSLFDNTTVVYIPDLNTGYKD

QISNFLPEGSHLSNNNEITSLTLKPPVDSLDSGNNPRLQKHPNFAFSVSSVNSLSNTI

FLGELSLILNQGECSSPDIQNSVEBESTMLLENDSPSETIPEQTLLPDEFVSCLGIVN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="type I cytokine receptor; IL-23R1; alternatively
spliced"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EELPSINTYFPQNILESHFNRISLLEK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /codon_start=1
/product="interleukin 23
/protein_id="AAY18345.1"
/db_xref="GI:62870699"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /map="1p31.2"
<1. .>1779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="mRNA"
/db_xref="taxon:9606"
/chromosome="1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zhang, Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (12),
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Score 1773.8; pred. No. 0; 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wang, S.-H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                934-943 (2006)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              receptor isoform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and Liu,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                             3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                   346
                                                                                                                                                                                                                                                                                                                                                                                                            60
                      766
                                               480
                                                                         706
                                                                                                 420
                                                                                                                          646
                                                                                                                                                                            586
                                                                                                                                                                                                      300
                                                                                                                                                                                                                              526
                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                466
                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                   406
                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                     286
                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                             ð
                                                           밁
                                                                               8
                                                                                                                                 δ
                                                                                                                                                              밁
                                                                                                                                                                                δ
                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
             밁
                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
             1561
                                                                                                              1441
                                                                                                                                       1667
                                                                                                                                                                 1381
                                                                                                                                                                                          1607
                                                                                                                                                                                                                1321
                                                                                                                                                                                                                                          1547
                                                                                                                                                                                                                                                                    1261
                                                                                                                                                                                                                                                                                            1487
                                                                                                                                                                                                                                                                                                                      1201
                                                                                                                                                                                                                                                                                                                                                1427
                                                                                                                                                                                                                                                                                                                                                                       1141
                                                                                                                                                                                                                                                                                                                                                                                                1367
                                                                                                                                                                                                                                                                                                                                                                                                                         1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                767
           GACTCAGGAAATAATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTTCAAGT
                                                                                                                                                               AACAGATCATTCCGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAACAGTTCCCCAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAGAAACAGGCAAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TACAAGGCTACAACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAATTCACTAAGCAACACAATATTTCTTGGAGAATTTAAGCCTCATATTAAATCAAGGA
                                                                                                                                                                                                                               ATTCCTGATCTCAACACTGGATATAAACCCCCAAATTTCAAATTTTCTGCCTGAGGGAAGC
                                                                                                                                                                                                                                                                    CCCCTGGAGACAAGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATAT
                                                                                                                                                                                                                                                                                  CCCCTGGAGACAAGAGACTACCCGCAAAACTCGCCTATTCGACAATACTACAGTTGTATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAGAAACAGGCAAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGCAACAGTCAGAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGCAACAGTCAGAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGACCATAATTTATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGACCATAATTTATTGGGATAGTCAAACAACAATTGAAAAGGTTTTCCTGTGAAATGAGA
                                                                                                              GACTCAGGAAATAATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGT
                                                                                                                                                                                                                  ATTCCTGATCTCAACACTGGATATAAACCCCCAAATTTCAAATTTTCTGCCTGAGGGAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AACAGATCATTCCGAACTGGGATTAAAAGAAGGATCTTGTTGTTAATACCAAAGTGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTATTGGGAATGATCGTCTTTGCTGTTATGTTGTCAATTCTTTTGATTGGGATATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAACAGTTCCCCAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTA
                                      1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                1366
                                                                                                                                                                 1440
                                                                                                                                                                                           1666
                                                                                                                                                                                                                   1380
                                                                                                                                                                                                                                            1606
                                                                                                                                                                                                                                                                                               1546
                                                                                                                                                                                                                                                                                                                        1260
                                                                                                                                                                                                                                                                                                                                                1486
                                                                                                                                                                                                                                                                                                                                                                         1200
                                                                                                                                                                                                                                                                                                                                                                                                                         1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1126
              1620
                                                              1560
                                                                                                               1500
                                                                                                                                                                                                                                                                      1320
                                                                                                                                                                                                                                                                                                                                                                                                 1426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
```

. <i>\$</i>	pb Qy	Query Ma Best Loo Matches	ORIGIN				CDS		FEATURES source	REFERENCE AUTHORS TITLE JOURNAL	JOURNAL PUBMED	REFERENCE AUTHORS	ORGANISM	ACCESSION VERSION KEYWORDS	AY937253 LOCUS DEFINITION		8 8	子 &	B 8
287 AAGAACTGCCAACCAAGGAAACTTCATTTTATAAAAATGGCATCAAAGAAAG	227 GAACCAGCCACAATTITTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAGCAATT 286	y Match 54.5%; Score 1556.2; DB 5; Length 1676; Local Similarity 93.9%; Pred. No. 0; hes 1671; Conservative 1; Mismatches 4; Indels 103; Gaps 1;		QAANALGMEESKOLQIHLDDIVIPSAAVISRAĒTINATVPKTIIYMDSÕTTIEKVSCE MRYKATTNQTMNVKEPDTNFTYVQQSEFYLEPNIKYVFQVRCQETGKGYMQPWSSPFF HKTPETVPQVTSKAFQHDTWNSGLTVASISTGHLTSGLKEGSYC"	/db_xref="G1:62870705" /translation="EPATIFKWANISIYCQAAIKNCQPRKLHFYKNGIKERFQITRI /translation="EPATIFKWANISIYCQAAIKNCQPRKLHFYKNGIKERFQITRI /KTTARLWYKNFLEPHASMYCTAECPKHFQETLICGKDISGYPPDIPDEVTRVIYEY SGNMTCTWNAGKLTYIDTKYVYHYKSLETEEBOOYLTSGYINISTDSLQGGKKYLVWV	<pre>spliced" /codon start=1 /product="interleukin 23 receptor isoform 3 F1" /protein id="AAV18348.1"</pre>	<pre>/l. 93 /note="IL-23R soluble receptor; IL-23R3-F1; lacks exon 9 /note="IL-23R soluble receptor; which leads to the (encodes transmembrane domain), which leads to the production of a IL-23R soluble ectodomain; alternatively</pre>	/mol type="manua" /db_xref="taxon:9606" /chromosome="1" /manua"1n31 2"	Medical College, #5 Dong Dan San Tiao, Beijing 100 Location/Qualifiers 11676 /0		isoforms of human interleukin-23 receptor gene in normal lymphoid cells and selected tumor cells Immunogenetics 57 (12), 934-943 (2006)	1 (bases 1 to 1676) I (bases 1 to 1676) Zhang, X.Y., Zhang, H.J., Zhang, Y., Fu, Y.J., Wang, S.H. and Liu, L. Tentification and expression analysis of	M Homo sapiens SM Homo sapiens Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Bukaryota; Butheria; Euarchontoglires; Primates; Catarrhini; Hominidae: Homo	AY937 AY937	AY937253 AY937253 AY937253 N Home sapiens interleukin 23 receptor isoform 3 F1 mRNA, partial Come of a learnast year and load	1741 TTGGAAAGCCACTTCAATAGGATTTCACTCTTGGAAAAG 1779	TTGGAAAGCCACTTCAATAGGATTTCACTCTTGGAAAAAG 2005	1907 TGTTTGGGGATCGTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATT 1966	1847 AATGATTCACCCAGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCC 1906
	-																		
8 8	?	8 8 8	\$	음 성	B &	B 8	B 8	D QY	B 8	B &	ያ ያ	B 8	8 8	B &	Db Qy	P 6	문	₹ ₽	& B
130 GAACTIAIGAATAATACCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAG 1097	TAISCASATA TECENATA TO A TENERA TENERA A CASCATO CONTROL TO TO A TENERA TECENATA TO A TENERA	GGA TIANANGAGGA TOTTATTTTATATATACAGGAAAATAGTTAATAGTTAATACCAAAGTOGCTT		1187 TTATTGGGAATGATCGTCTTTGCTGTTATGTTGGTCAATTCTTTCT	1127 ACAGTTGCTTCCATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTT 1186	1067 GAAACAGTTCCCCAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTA 1126		947 GTGCAACAGTCAGAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGT 1006 	887 TACAAGGCTACAACCAAACTTGGAATGTTAAAGAATTTGACAACCAATTTTACATAT 946	AAGACCATAATTTATTGGGATAGTCAAACAATTGAAAAGGTTTCCTGTGAAATGAGA	767 ATAGTGATACCTTCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCC 826	707 CAAGCAGCAAACGCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGAT 766 	647 AGCTATATTAACATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTC 706 	587 AAATACGTGGTACATGTGAAGAGTTTAGAGACAGAAGAAGAAGAGCAACAGTATCTCACCTCA 646	527 GAATATTCAGGCAACATGACTTGCACCTGGAATGCTRGGAAGGTCACCTACATAGACACA 586	467 AAAGACATTTCTTGGATATCCGGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTAT 526	GCTTCTATGTACTGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGA	121 ATCACAAGGATTAATAAAACAACCAGCTCGGCTTTGGTATAAAAAACTTTCTGGAACCACAT 180	61 AAGAACTGCCAACCAAGGAAACTTCATTTTTATAAAAATGGCATCAAAGAAAG

```
JOURNAL
PUBMED
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 12
AY937254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Snoo
                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1547
                                                                                                                                                                                                                                             1 (bases 1 to 1676)
Zhang, X.Y., Zhang, H.J., Zhang, Y., Fu, Y.J., He, J., Zhu, L.P.,
Zhang, S.H. and Liu, L.
Identification and expression analysis of alternatively spliced
isoforms of human interleukin-23 receptor gene in normal lymphoid
cells and selected tumor cells
cells and selected tumor cells
Immunogenetics 57 (12), 934-943 (2006)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cds, alternatively spliced.
AY937254
                                                                                       Direct Submission
Submitted (16-FEB-2005) Microbiology and
Medical College, #5 Dong Dan San Tiao, Be
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebr
Mammalia; Eutheria; Euarchontoglires; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AY937254 1676 bp mRNA linear PRI 07-FEB-
Homo sapiens interleukin 23 receptor isoform 3 F3 mRNA, partial
                                                                                                                                                                               2 (bases 1 to 1676)
Zhang, X.-Y., Zhang, Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                               Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ното варіеля
                                                                                                                                                                                                                                 16372191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGGAAAGCCACTTCAATAGGATTTCACTCTTGGAAAAG 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGTTTGGGGATCGTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATÄTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATGATTCACCCAGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTTGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAATGCAGTTCTCCTGACATACAAAACTCAGTAGAGGAAGCAACCACCATGCTTTTTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAATTCACTAAGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACTCAGGAAATAATCCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTCTCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACTCAGGAAATAATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTTCTGTTTTCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATCTCAGCAATAATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTCCTGATCTCAACACTGGATATAAAACCCCAAATTTTCAAATTTTCTGCCTGAGGGAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCCTGGAGACAAGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCCCTGGAGACAAGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATAAAAGAAATCTTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATAAAAGAAATCTTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAATTCACTAAGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATCTCAGCAATAATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTA
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                         1. .1676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GI:62870706
                                                                                                                                                                               Zhang, H.-J., Wang, S.-H. and
                                                                                                                  nd Etiology, Peking Un
Beijing 100005, China
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Catarrhini;
                                                                                                                                                                                    Liu, L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRI 07-FEB-2006
                                                                                                                                       Union
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1966
                                 S
                                                                                       멍
                                                                                                                                     S
                                                                                                                                                                                                                 $
                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
       밁
                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 1671;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDS
                                          947
                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
       721
                                                                                            661
                                                                                                                                       887
                                                                                                                                                                                                                             827
                                                                                                                                                                                                                                                                                                                     767
                                                                                                                                                                                                                                                                                                                                                                                                               707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           227 GAACCAGCCACAATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                            GTGCAACAGTCAGAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGT
                                                                                                                                                                                                                                                                                                                                                                                              CAAGCAGCAAACGCACTAGGCATGGAAGAGTCAAAAACAACTGCAAATTCACCTGGATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAATATTCAGGCAACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCACAAGGATTAATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCACAAGGATTAATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGCAACAGTCAGAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGT
                                                                                               TACAAGGCTACAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATAT
                                                                                                                         TACAAGGCTACAACCAAACCTTGGAATGTTAAAGAATTTTGACACCAATTTTTACATAT
                                                                                                                                                                                  AAGACCATAATTTATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGA
                                                                                                                                                                                                                                                                                                    ATAGTGATACCTTCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCC
                                                                                                                                                                                                                                                                                                                                                                    CAAGCAGCAAACGCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCTATA TTAACATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAATACGTGGTACATGTGAAGAGTTTAGAGACAGAAGAAGAAGAGCAACAGTATCTCACCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAATATTCAGGCAACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGAAGTAACCCGTGTCATTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAGACATTTCTTCTGGATATCCGCCAGATATTCCCTGATGAAGTAACCTGTGTCATTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTTCTATGTACTGCACTGCTGAATGTCCCCAAACATTTTCAAGAGACACTGATATGTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTTCTATGTACTGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAACCAGCCACAATTITTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCTATATTAACATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAATACGTGGTACATGTGAAGAGTTTAGAGACAGAAGAAGAAGAACAGTATCTCACCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /codon_start=1
/product="interleukin 23 receptor isoform 3 F3"
/protein_id="AAY1849.1"
/protein_id="AAY1849.1"
/db_xref="q1:62870707"
/translation="MEFWANSCFHLYRAPYFWIKRRILLLIPKWLYEDIPNWKNSNVV
/translation="MEFWANSCFHLYRAPYFWIKRRILLLIPKWLYEDIPNWKNSNVV
/ktranslation="MEFWANSCFHLYRAPYFWIKRRILLIPKWLYEDIPNWKNSNVV
/ktranslation="MEFWANSCFHLYRAPYFWIKRRILLIPKWLYEDIPNWKNSNVV
/translation="MEFWANSCFHLYRAPYFWIKRRILLIPKWLYEDIPNWKNSNVV
/ktranslation="MEFWANSCFHLYRAPYFWIKRRILLIPKWLYEDIPNWKNSNVVV
/ktranslation="MEFWANSCFHLYRAPYFWLYEDIPNWKNSNVVV
/ktranslation="MEFWANSCFHLYRAPYFWLYEDIPNWKNSNVVV
/ktranslation="MEFWANSCFHLYRAPYFWLYEDIPNWKNSNVVV
/ktranslation="MEFWANSCFHLY"
/ktranslation="MEF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (encodes transmembrane domain), which leads to the production of an intracellular endodomain IL-23R go by a frameshift; alternatively spliced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             885. .>1676
/note="IL-23R endodomain protein; IL-23R3-F3; lacks exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /map="1p31.2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /chromosome="1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           54.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1556.2;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     generated
                                                    1006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   346
                                                                                               720
                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                 766
                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
```

중 유

ঠ 8

중 음

5 망 8 S B

ક 밁

Ś

S 문

δ 밁

```
RESULT 13
AL389925
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     名 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                               밁
                                                                                                              ક
                                                                                                                                   뮻
                                                                                                                                                          र्
                                                                                                                                                                              밁
                                                                                                                                                                                                    $
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                 ક
                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                  음 중 음
                                                                                                                                                                                                                                                                                                                                                                                  ફ
                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ 🖁 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ક
                                                                                                                                                                                                                                                                                                                                             1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1038
                                                                                                                                                                  1847
                                                                                                                                                                                                                                                                             1338
                                                                                                                                                                                                                                                                                                   1667
                                                                                                                                                                                                                                                                                                                        1278
                                                                                                                                                                                                                                                                                                                                                                    1218
                                                                                                                                                                                                                                                                                                                                                                                          1547
                                                                                                                                                                                                                                                                                                                                                                                                               1158
                                                                                                                                                                                                                                                                                                                                                                                                                                   1487
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGTTTGGGGATCGTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCCACAAAATATT
                                                                                                                                            AATGATTCACCCAGGGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCC
                                                                                                                                                              AATGATTCACCCAGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCC
                                                                                                                                                                                       GAATGCAGTTCTCCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAA
                                                                                                                                                                                                  GAATGCAGTTCTCCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAA
                                                                                                                                                                                                                                                         GTGAATTCACTAAGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGA
                                                                                                                                                                                                                                                                                         GACTCAGGAAATAATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTTCTGTTTCAAGT
                                                                                                                                                                                                                                                                                                                                     CATCTCAGCAATAATAATGAAATTACTTCCTTAACACTTTAAACCACCACCAGTTGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                   ATTCCTGATCTCAACACTGGATATAAACCCCAAATTTCAAATTTTCTGCCTGAGGGAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                CCCCTGGAGACAAGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATAT
                                                                                                                                                                                                                                                                                                                                                                                                                             CCCCTGGAGACAAGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATAAAAGAAATCTTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATAAAAGAAATCTTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAGATACAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAACTTATGAATAATTACAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAACTTATGAATAATTACAGAGGAGGTCCTATATGTTGATCCCATGATTACAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AACAGATCATTCCGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAGTTGCTTCCATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAACAGTTCCCCAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAACAGTTCCCCAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTA
                                                                                                                                                                                                                                                                             GACTCAGGAAATAATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTCTCAAGT
                                                                                                                                                                                                                                                                                                                         CATCTCAGCAATAATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAGTTGCTTCCATCTCTACAGGGCACCTTACTTCT------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -GGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTT
 ģ
 DNA
                                                       1676
  linear
 PRI 18-MAY-2005
                                                                                                                      1966
                                                                                                                                            1577
                                                                                                                                                                  1906
                                                                                                                                                                                        1517
                                                                                                                                                                                                            1846
                                                                                                                                                                                                                                                                                                   1726
                                                                                                                                                                                                                                                                                                                         1337
                                                                                                                                                                                                                                                                                                                                              1666
                                                                                                                                                                                                                                                                                                                                                                    1277
                                                                                                                                                                                                                                                                                                                                                                                                                1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1066
                                                                                                                                                                                                                                                                                                                                                                                          1606
                                                                                                                                                                                                                                                                                                                                                                                                                                     1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                            mRNA
                                                                                                                                           misc_feature
                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                          Center code:
Web site: htt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hominidae; Homo.
```

```
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Direct Submission

AL Submitted (13-MAY-2005) Wellcome Trust Sanger Institute, Hinxton, Submitted (13-MAY-2005) Wellcome Trust Sanger Institute, Hinxton, Cambridgeshire, CBLO 15A, UK. B-mail enquiries: vega@sanger.ac.uk Clone requeste: clonerequest@sanger.ac.uk
On or before Nov 12, 2004 this sequence version replaced gi:330523, gi:11342817.

The following abbreviations are used to associate primary accession numbers given in the feature table with their source databases:
Emm: SMBL; Sw:, SMISSPROT; Tr:, TREMBL; Wp:, WORMPEP; Information on the WORMPEP database can be found at http://www.sanger.ac.uk/Projects/C elegans/wormpep This sequence was generated from part of bacterial clone contigs of human chromosome 1, constructed by the Sanger Centre Chromosome 1 Mapping Group. Further information can be found at http://www.sanger.ac.uk/HGP/Chrl
RP11-131015 is from the library RPCI-11.1 constructed by the group of Pieter de Jong. For further details see
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Draft Sequence Produced by Genome Sequencing Center, Washington University School of Medicine, 4444 Forest Park Parkway, St. Louis, MO 63108, USA

AND 63108, USA

Intp://genome.wustl.edu/gsc/index.shtml

This sequence was finished as follows unless otherwise noted: all regions were either double-stranded or sequenced with an alternate chemistry or covered by high quality data (i.e., phred quality >= 30); an attempt was made to resolve all sequencing problems, such as compressions and repeats; all regions were covered by at least one subclone; and the assembly was confirmed by restriction digest, except on the rare occasion of the clone being a YAC.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human DNA sequence from clone RP11-131015 on chromosome 1 Contains the 3' end of the gene for interleukin-23 receptor (IL23R), a DnaJ (Hsp40) homolog subfamily B member 6 (DNAJB6) pseudogene and the 5' end of the gene for interleukin 12 receptor, beta 2 (IL12RB2),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Center: Wellcome Trust
Center code: SC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 122289)
Hall, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             complete sequence.
AL389925 AC026054
AL389925.10 GI:11990046
HTG; DNAJB6; IL12RB2; IL23R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Web site: http://www.sanger.ac.uk
Contact: vega@sanger.ac.uk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             http://www.chori.org/bacpac/home.htm
VECTOR: pBACe3.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                           /note="Clone_right_end: RP4-763G1"
join(Al109843.25:34023. .34164, Al109843.25:35715. .358
join(Al109843.25:36955. .37261, Al109843.25:50459. .50582,
Al109843.25:68360. .68520, Al109843.25:74533. .74678,
Al109843.25:87197. .87353, Al109843.25:104336. .104425,
Al109843.25:107802. .107904, 8847. .8937, 11488. .12989)
/gene="IL23R"
/locus tag="RP1-131015.1-001"
/locus tag="RP1-131015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
/chromosome="1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /clone_lib="RPCI-11.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .122289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .one="RP11-131015"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Genome Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sanger Institute
                                                                                                                                                                                                                                                          .35813,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .35813,
```

```
gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /db xref="Interpro:|PR003961"
/db xref="Uni-Pro0:|PR003961"
/db xref="Uni-Pro0:|PR003961"
/db xref="Uni-Pro0:|PR003961"
/db xref="Uni-Pro0:|PR003961"
/t-anslation="MnOVTIOMDAVIALYILFSWCHGGITNINCSGHIWVEPATIFKM
/t-anslation="MnOVTIOWDAVIALYILFSWCHGGITNINCTERPASMYCT
AECDRHPQETLICGKOISSGYEPDIPDEVTCYIYEYSGMYCTYWARAKLGWEESKQLQIHLDDIV
AECDRHPQETLICGKOISSGYEPDIPDIPDEVTCYIYEYSGWARLGWEESKQLQIHLDDIV
IPSANUISRAETINATVPKTIIYMDSOTTIEKVSCEMXYKATMQTWNUKEFDTWFTY
VQQSEFYLEPNIKYVFQVRCQETGKRYWQPWSSLFPHKTPETVPQVTSKAFQHDTWNS
GLTVASISTGHLTSDNRGDIGLLIGMIVPAVMDSBCVLYVDPMITEXKEIFTPEHKFTPY
KKENTGPLETRDYPQNSLFDNTTVVYIPDLNTGYKPQISNFLPEGSHLSNNNEITSLT
KKEPVDSLDSGNNPRLQKHPNFAFSVSSVNSLSNTIFLGELSLILNQGECSSPDIONS
LKPPVDSLDSGNNPRLQKHPNFAFSVSSVNSLSNTIFLGELSLILNGGECSSPDIONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     match: cDNAs: Em:BC016829.1"
join(AL109843.25:35744. .35813,AL109843.25:36965. .37261
AL109843.25:50459. .50582,AL109843.25:68360. .68520,
AL109843.25:74533. .74678,AL109843.25:87197. .87353,
AL109843.25:104336. .104425,AL109843.25:87197. .87353,
AL109843.25:104336. .104425,AL109843.25:107802. .107904,
//gene="IL23R"
                         /db_xref="GOA:QSVWK7"
/db_xref="GOA:QSVWK7"
/db_xref="UniProcKB/TremBL:QSVWK7"
/translation="HFLLPPLSKKSLLPPTMILRPYQPCGTVKEFDTNFTYVQQSEFY
/translation="HFLLPPLSKKSLLPFHKTPETVPQVTSKAFQHDTNNSGLTVASI
LEPNIKYVFQVRCQETGKRYWQPWSSLFFHKTPETVPQVTSKAFQHDTNNSGLTVASI
STGHLTSDNRGDIGLLLGMIVFAVMLSILSLIGIFNRSFRTGIKRRILLLIPKWLYED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  match: cDNA8: Em:BC040720.2"
join(AL109843.25:<75239. .75321,AL109843.25:87197. .87353,
AL109843.25:104336. .104425,AL109843.25:107802. .107904,
8847. .8937,11488. .12258)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /locus_tag="ntP11-131015.1-001"
/product="interleukin 23 receptor"
/note="match: EST8: Em:CD708943.1
match: cDNAs: Em:AF461422.1 Em:BC016829.1"
join(AL109843.25:75261. .75321,AL109843.25:87197. .87353,
                                                                                                                                                                                                                                                                                                                                                                                         join(AL109843.25:<75239. .75321,AL109843.25:87197. .8735
AL109843.25:104336. .104425,AL109843.25:107802. .107904,
8847. .8937,11488. .12138)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tocus tag="RP11-131015.1-003"

join (AI109843.25:<75229. .75321,AL109843.25:87197. .8735

AL109843.25:104336. .104425,AL109843.25:107802. .107904,

8847. .8937,11488. .12258)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8847. .8937,11488. .12685)
/gene="IL23R"
                                                                                                                                                                      /codon_start=3
/product="interleukin 23
/protein_id="CAH70408.1"
/db_xref="GI:55710298"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VEEETTMLLENDS PSET I PEQTLLP DEFVSCLG I VNEELPS INTY FPQNILESHFNR I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /codon_start=1
/product="interleukin_23 receptor"
/protein_id="CAH70406.1"
/ab_xref="GI:55710296"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /locus tag="RP11-131015.1-003"
/product="interleukin 23 recept
/note="match: ESTs: Em:BF210400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8847. .8937,11488. .12685)
| PNMKNSNVVKMLQENSELMNNNSSEQVLYVDPMITEIKEIFIPEHKPTDYKKENTGP
                                                                                                                                                                                                                                                                                                                                                                      'gene="IL23R"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            note="match: proteins: Tr:Q8NFQ9"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            standard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         locus_tag="RP11-131015.1-003"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /product="interleukin 23 receptor"
/note="match: ESTs: Em:BQ228535.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        join (AL 109843.25:75261.
                                                                                                                                                                                                                                                                                                         standard name="OTTHUMP00000037679"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene="IL23R"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene="IL23R"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene="IL23R"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  locus_tag="RP11-131015.1-002"
                                                                                                                                                                                                                                                                                                                                   locus_tag="RP11-131015.1-003"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               locus_tag="RP11-131015.1-002"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         xref="GOA:Q5VWK5"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               _name="OTTHUMP0000010660"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .75321,AL109843.25:87197. .87353,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .37261,
                                      S
                                                                                                                   밁
                                                                                                                                                                      5
                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                      S
문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 1513;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            polyA_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     polyA_signal
   11640 GCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTCAACACTGGATA 11699
                                                                                                                                                                                                                                            11520
```

Sg

mRNA

mRNA

Sg

```
1330 AAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAATAATAATTCCAG 1389
GCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTCAACACTGGATA
                                                                                                                                                                                       TGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATCTTCATCCCAGA
                                                                                                                                                                                                                                         TGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATCTTCATCCCAGA
                                                                            ACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACAAGAGACTACCC
                                                                                                                               ACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACAAGAGACTACCC
                                                                                                                                                                                                                                                                                                        AAAATAAAATGATGTCTTTTTTTCCTAGGAAAATAGTGAACTTATGAATAATAATTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       82597. .82739,83670. .83820,91634. .91713,103880.
120835. .121035,AL358512.9:5157. .5255,
AL358512.9:5346. .5504,AL358812.9:12707. .12844,
AL358512.9:19300. .19390,AL358512.9:22750. .22849,
AL358512.9:28268. .28810)
/gene="Rp11-102M16.1"
/locus tag="Rp11-102M16.1"
/standard_name="OTTHUMP00000010662"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /locus_tag="RP11-102M16.1-001"
/product="interleukin 12 receptor, beta 2 (IL12RB2)"
/note="match: cDNAs: Em:AF330213.1 Em:AF448143.1
Em:AJ308426.2 Em:U64198.1"
join(73379...73454,74612...74899,79745...79859,81210...81394,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /Īocus tag="RP11-102M16.1-001"
join(60374. .60977,73343. .73454,74612. .74899,79745. .75
81210. .81394,82597. .82739,83670. .83820,951634. .91713,
103880. .104099,120835. .121035,AL358512.9:5157. .5255,
AL358512.9:5346. .5504,AL358512.9:12707. .12844,
AL358512.9:19300. .19390,AL358512.9:22750. .22849,
AL358512.9:28268. .29621)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 join(60374 .60977,73343 .73454,74612 .74899,79745 .79
81210 .81394,85597 .82739,83670 .8191634 .91713,
103880 .104099,120835 .121035,A1258512 .9:5157 .5255,
AL358512.9:5346 .5504,AL358512.9:12707 .12844,
AL358512.9:19300 .19390,AL358512.9:22750 .22849,
AL358512.9:19300 .29621)
AL358512.9:28268 .29621)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /codon_start=1
/product="interleukin 12 receptor, beta 2 (IL12RB2)"
/protein_id="CAH70407.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tr:Q8BPF6 Tr:Q8IUK1 Tr:Q8WN90 Tr:Q921S2 Tr:Q9DAN5"
/pseudo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /locus_tag="RP11-131015.2-001"
/note="match: proteins: Sw:054946 Sw:075190 Sw:Q9QYI5
/rr:AAH47056 Tr:AAP35751 Tr:CAA44968 Tr:CAA44969 Tr:Q77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /locus_tag="RP11-131015.1-002"
31062._.31789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LETRDYPQNSLFDNTTVVYIPDLNTGYKPQISNFLPEGSHLSNNNEITSLTLKPPVDS
LDSGNNPRLOKHPVPAFSVSSVNSLSNTIFLGELSLILNQGEGSSDIONSVEEETTM
LLENDSPSETJPEQTLLPDEFVSCLGIVNEELPSINTYFPQNILESHFNRISLLEK"
12653...12658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /gene="RP11-102M16.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            product="DnaJ (Hsp40) homolog, subfamily B, member 6 (DNAJB) pseudogene"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  codon_start=1/product="DnaJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene="IL23R"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene="IL23R"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           locus_tag="RP11-131015.2-001"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             locus_tag="RP11-131015.1-002"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .062. .31789
                                                                                                                                                                                                                                                                                                                                                                                                                                             52.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                  2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1505.2;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                proteins: Sw:Q99665"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          멂
                                                                                                                                                                                                                                                                                                                                                                                                                  15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 122289;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              91713,103880. .104099,
                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                 1569
                                                                                                                                                                                                                                         1449
                                                                                                                                  1509
                                                                            11639
                                                                                                                                                                                       11579
                                                                                                                                                                                                                                                                                                        11519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .79859,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .79859,
                                                                                                                                                                                                                                                                                                                                                                                                                  0
```

ঠ

원

중 유

유 왕

유

```
11940
                                                                                                                                                                                                                                               12180
                                                     12600
                                                                              12540
                                                                                                         12480
                                                                                                                                    12420
                                                                                                                                                               12360
                                                                                                                                                                                         12300
                                                                                                                                                                                                                   12240
                                                                                                                                                                                                                                                                         12120
                                                                                                                                                                                                                                                                                                    12060
                                                                                                                                                                                                                                                                                                                              12000
                                                                                                                                                                                                                                                                                                                                                                                                                                         11760
                                                                                                                                                                                                                                                          2050
                                                                                                                                                                                                                                                                                                                 1930
                                                                                                                                                                                                                                                                                                                                           1870
                                                                                                                                                                                                                                                                                                                                                                      1810
                                                                                                                                                                                                                                                                                                                                                                                    11880
                                                                                                                                                                                                                                                                                                                                                                                                                           1690
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1630
                                                                 2470
                                                                                                                                                                            2230
                                                                                                                                                                                                      2170
                                                                                                                                                                                                                                                                                      1990
                                                                                                                                                                                                                                                                                                                                                                                                1750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTTCGAGTCCAG
                         TTTTTAATTTTAGCCATTCTTCTGCCTMATTTCTTAAAATTAGAGAATTAAGGTCCCGAA
                                                                                                                                                                       AGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCCGGGAGCTCCATGCC
                                                                                                                                                                                        TAGGGGATTGCTGGGCCATATGATAAGCATATGTTTCAGTTCTACCAATCTTGTTTCCAG
                                                                                                                                                                                                                   ATTCACATACAAATCTTCACATGGACACATGTTTTCATTTTCCTTTGGATAAATACCTAGG
                                                                                                                                                                                                                                              TCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATCGTGAATGAGGA 1929
                                                                                                                                                                                                                                                                                                                                                         AAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCCAGTGAAACTAT
                                                                                                                                                                                                                                                                                                                                                                AAACTCAGTAGAAGGAGGAAAACCACCATGCTTTTGGAAAATGATTCACCCAGTGAAACTAT
                                                                                                                                                                                                                                                                                                                                                                                            ATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCTCCTGACATACA
                                                                                                                                                                                                                                                                                                                                                                                                              AGTAGTGACATTTCTGTGCTCCTACCATCACCATGTAAGAATTCCCGGGAGCTCCATGCC
                                                                                                                                                                                                                                                                                                                                                                                    ATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCTCCTGACATACA
            2649
                          12719
                                                                                                                                                                                          12359
                                                                                                                                                                                                                    12299
                                                                                                                                                                                                                                  2169
                                                                                                                                                                                                                                                             2109
                                                                                                                                                                                                                                                                                       2049
                                                                                                                                                                                                                                                                                                                 1989
                                                                                                                                                                                                                                                                                                                               12059
                                                                                                                                                                                                                                                                                                                                                                       1869
                                                                                                                                                                                                                                                                                                                                                                                                 1809
                                                                                                                                                                                                                                                                                                                                                                                                                           1749
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1629
                                                                               12599
                                                                                                                       2409
                                                                                                                                                  2349
                                                                                                                                                                            2289
                                                                                                                                                                                                       2229
                                                                                                                                                                                                                                                                                                                                                                                    11939
                                                                                                                                     12479
                                                                                                                                                               12419
                                                                                                                                                                                                                                               12239
                                                                                                                                                                                                                                                                          12179
                                                                                                                                                                                                                                                                                                    12119
                                                                                                                                                                                                                                                                                                                                                                                                                                         11819
12779
                                                                                                          12539
                                                   음 성
                                                                                         ð
                                                                                                                   S
                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                   음 중
                                                                                                                                                                                                                                                                                                                                                                                                                                              음 중
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      당
유 성
                      문
                                   δ
                                                                              밁
                                                                                                     밁
                                                                                                                                                           밁
                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                    JOURNAL
```

중 음 중

음 중 음

361

TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC

420

8 8 8 8 8 8

8 8 8 8

ફ

음 성 음

8 8 8 8 8 8 8

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 14
AX467352
LOCUS
DEFINITION
ACCESSION
VERSION
VERWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
source
                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 1695; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12840
                                                                                           359
                                                                                                                    181
                                                                                                                                                              121
                                                                                                                                                                                                                                                    479
                            301
                                                  419
                                                                       241
                                                                                                                                         299
                                                                                                                                                                                   239
                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (numam, Homo sapiens (numam, Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Metazoa; Chordata; Craniata; Primates; Catarrhini; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                         Cosman,D.J., Mosley,B.A., Bird,T.A., I
Hematopoietin receptors hpr1 and hpr2
Patent: WO 0229060-A 22 11-APR-2002;
Immunex Corporation (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX467352
Sequence 22 from Patent
AX467352
AX467352.1 GI:21900588
                                                                                                                                                                                                          GGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTGGCCAATATGCTGAAACCCTGTCTCTACTAAAATTACAAAAATTAGCCGGCCATGGT
                            TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                   TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCCAGGC
                                                                        AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                     AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACGATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAAAACTCTGTCTGGAAAAAAAAAAAAA 12989
                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                       1. .1698
                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                              52.3%; Score 1493.6; 89.7%; Pred. No. 0; tive 2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1698 bp
WO0229060.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                               Dubose
                                                                                                                                                                                                                                                                                                                       멂
                                                                                                                                                                                                                                                                                                ļ,
                                                                                                                                                                                                                                                                                                                       2
                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                              , R. F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                       Length 1698
                                                                                                                                                                                                                                                                                                                                                                                                                                               ă
                                                                                                                                                                                                                                                                                                   192;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 16-JUL-2002
                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2769
          538
                               360
                                                     478
                                                                           300
                                                                                               418
                                                                                                                     240
                                                                                                                                           358
                                                                                                                                                                 180
                                                                                                                                                                                       298
                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                       60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12839
```

```
1499
                                                                                                                                                                                                                                                                              1069
                                                                                                                                                                                                                                                                                                                    1379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1199
                                       1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1019
1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1259
                                                                                                                                                                                                                                                                                                                                                                                                                                            955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       539
                                     AACACTGGATATAAACCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAAT
                                                                                                                                                                                                                                                                                                        AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                                                                                                                                                 CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCCTGAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATGTGAAGAGTTTTAGAGACAGAAGAAGAAGCACACCACCTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTA
AATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT 1678
                                                                                                                                            AGAGACTACCCGCAAAACTCCGCTATTCGACAATACTACAGTTGTATATATTCCCTGATCTC
                                                                                                                                                                                                                                      TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                              -----GGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG 1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAAACA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TATTGGGATAGTCAAACAACTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGGTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                     AGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTC
                                                                                                                                                                                                                                                                              AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTC 1258
                                                                                                                                                                                                                                         1498
                                                                                                                                                                                                                                                                                                                      1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1018
                                                                           1618
                                                                                                                       1248
                                                                                                                                                           1558
                                                                                                                                                                                                   1188
                                                                                                                                                                                                                                                                                                                                                              1068
                                                                                                                                                                                                                                                                                                                                                                                                    1378
                                                                                                                                                                                                                                                                                                                                                                                                                                              1008
                                     1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           954
```

S

몽

음 성

5 B S

중 유

ORIGIN

음 성 음

δ

S

밁

S

음 성

밁

음 성

음 성 음

8 8 8

음 중 음

8

음 성 음

중 유

```
PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 15
AY937251
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                             Sg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AY937251
1618 bp mRNA linear PRI 07-FEB-2006 Homo sapiens interleukin 23 receptor isoform 2 F1 mRNA, partial cds, alternatively spliced.
AY937251
AY937251.1 GI:62870700
                                                                                                                                                                                                                                                                                                               2 (bases 1 to 1618)
Zhang,X.-Y., Zhang,Y., Wang,S.-H. and Liu
Direct Submission
Submitted (16-FEB-2005) Microbiology and
                                                                                                                                                                                                                                                                                                                                                                                                       Identification and expression analysis of alternatively spliced isoforms of human interleukin-23 receptor gene in normal lymphoid cells and selected tumor cells
Immunogenetics 57 (12), 934-943 (2006)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 1618)
Zhang, X.Y., Zhang, H.J.,
Wang, S.H. and Liu, L.
                                                                                                                                                                                                                                                                                Medical College, #5 Dong Dan San
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                         16372191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTTGGAAAGCCAC 1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC 1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCC 1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTTCAAGTGTGAATTCACTA 1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTCAATAGGATTTCACTCTTGGAAAAGTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGTGTGAATTCACTA
/codon_start=1
/product="interleukin 23 receptor isoform 2 F1"
/protein_id="AAY18346.1"
/protein_id="AAY18346.1"
/db_xref="G1:62870701"
/translation="EPATIFKMGTNISIYCQAAIKNCQPRKLHFYKNGIKERFQITRI
NKTTARLWYKNFLEPHASMYCTAECPKHFQETLICGKDISSGYPPDIPDEVTCVIYEY
SGNWTCTWNAGKLTYIDTKYVVHVKSDTFCSRHFQG"
                                                                                                                                                                                             /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/chromosome="1"
                                                                                                                        /note="IL-23R soluble receptor; IL-23R2-F1;
ilternatively spliced"
                                                                                                                                                                           map="1p31.2"
                                                                                                                                                                                                                                                                    .1618
                                                                                                                                                                                                                                                                                                                                                     Wang, S.-H. and Liu, L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Zhang, Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1698
                                                                                                                                                                                                                                                                                                    Tiao,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fu, Y.J.,
                                                                                                                                                                                                                                                                                                  nd Etiology, Peking Un
Beijing 100005, China
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Не, J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Zhu, L
                                                                                                                                                lacks
                                                                                                                                                                                                                                                                                                                    Union
                                                                                                                                                exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1548
                                                                                                                                                ភ
```

Search completed: October 14, 2006, 17:19:15 Job time : 15919 secs

. S

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OM nucleic - nucleic search, using sw
                   იი
                                                           ααα
                                                                                         Ω
                                                                                                               a
                                                                                                                                       000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Perfect score:
    222118
232118
232118
                                                                                                                                                                                                                                                                                     pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                             1236.6
1039.2
            Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                      Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-667-289-1
2857.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               October 14, 2006, 13:44:26; Search time 566 Seconds (without alignments) 9438.089 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2395520 seqs, 934235491 residues
                                                                                                                                                                                                                                                                                                                         GenCore version 5.1.9
Copyright (c) 1993 - 2006 Biocceleration Ltd:
          3 1307
3 1784
9 36871
9 44567
6 81007
6 438732
1000
6 1000
6 1000
6 1000
6 22558
6 84105
6 84105
6 84105
6 44423
6 44423
6 44423
6 44423
6 420555
6 420555
6 420555
6 420555
                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                          2123
1910
                                                                                                                                                                                                                                        멂
    US-11-274-375-5

US-11-274-375-3

US-11-274-375-3

US-11-274-375-7

US-11-274-375-7

US-11-30-648-46

US-11-412-373-1

US-10-569-20-341

US-11-266-748A-344424

US-11-266-748A-40487995

US-11-266-748A-407995

US-11-266-748A-201057

US-11-266-748A-201057

US-11-266-748A-201057

US-11-266-748A-201057

US-11-266-748A-201057

US-11-266-748A-201057

US-11-266-748A-59991

US-11-266-748A-59991
                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        model
                                                                            Sequence 5, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 7, Appli
Sequence 62, Appli
Sequence 682, Appli
Sequence 46, Appli
Sequence 341, Appli
Sequence 32995,
Sequence 29295,
Sequence 34424,
Sequence 475925,
Sequence 475925,
Sequence 475925,
Sequence 475925,
Sequence 475925,
Sequence 374, Appli
                            Sequence 1, Appli
Sequence 25014, A
Sequence 1140, Ap
Sequence 1151, Ap
Sequence 201057,
                                                                                                                                                                                                                                       Description
           Sequence
Sequence
```

O	ი-ი	ი ი	O	a	O	0 0) ()	ი
44 45	41 42	387	35 36	ս ս 4	30 31 32	28 29	3 6 G	24
240.4 240 239.8	240.6	240.6	240.6 240.6	240.8 240.8	240.8 240.8 240.8	240.8	242.2 241.2	242.2
888	888	888	8.4	8.4	8 8 8 4 4 4	8 6 6 4	8 8 0 7 4 4	8.5
180227 180227 1000	1000 4418 171653	1000	1000	1000	1000	1000	227246 142281	127145
α o ₀	œ œ œ	0000	œ œ	60 60	@ @ @	œ æ ø	v & v	œ
US-10-641-321-205 US-10-539-228-308 US-11-266-748A-205230	US-11-266-748A-476160 US-11-266-748A-31435 US-11-266-748A-22660	US-11-266-748A-293196 US-11-266-748A-344625 US-11-266-748A-405114	US-11-266-748A-224342 US-11-266-748A-246596	US-11-266-748A-392371 US-11-266-748A-483089	US-11-266-748A-200673 US-11-266-748A-282815 US-11-266-748A-309455	US-11-266-748A-114953 US-11-266-748A-120084	US-10-539-228-314 US-11-266-748A-23957 US-10-540-898-787	US-11-266-748A-59222
Sequence Sequence Sequence	Sequence Sequence	Sequence Sequence	Sequence Sequence	Sequence Sequence	Sequence Sequence Sequence	Sequence Sequence		Sequence
Sequence 205, App Sequence 308, App Sequence 205230,	476160, 31435, A 22660, A	293196, 344625, 405114,	224342, 246596,	392371, 483089,	200673, 282815, 309455,	114953, 120084,	314, App 23957, A 787 App	59222, A

ALIGNMENTS

```
; TYPE: DNA;
; ORGANISM: Homo sapiens;
; FEATURE:
; NAME/KEY: CDS;
; LOCATION: (98)...(1984)
US-11-274-375-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REPERENCE: 06501-105US1
CURRENT APPLICATION NUMBER: US/11/274,375
CURRENT FILING DATE: 2005-11-14
PRIOR APPLICATION NUMBER: US/10/105,930
PRIOR PAPPLICATION NUMBER: US/10/105,930
PRIOR APPLICATION NUMBER: PCT/JP00/06654
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: JP 2000-240397
PRIOR APPLICATION NUMBER: JP 2000-240397
PRIOR FILING DATE: 2000-08-03
PRIOR PRILING DATE: 1999-09-27
NUMBER: JP 11-273358
PRIOR FILING DATE: 1999-09-27
NUMBER OF SEQ ID NOS: 77
SOFTWARE: FRASTSEQ for Windows Version 4.0
SEQ ID NO 5
LENGTH: 2123
                                  á
                                                                                  문
                                                                                                                          ঠ
                                                                                                                                                                                                            S
                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-11-274-375-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 5, Application US/11274375
Publication No. US20060106201A1
GENERAL INFORMATION:
APPLICANT: Maeda, Masatsugu
APPLICANT: Yaguchi, Noriko
TITLE OF INVENTION: NOVEL HEMOPOIETIN RECEPTOR PROTEIN,
                                                                                                                                                                                                                                                        Query Match 72.8
Best Local Similarity 99.8
Matches 2085; Conservative
  127
                                           148
                                                                                  28 CAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGTGGAATTATGTGCTTCAAACAGGTTGAA
                                                                                                                                                                          7 CAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGTGGAATTATGTGCTTCAAACAGGTTGAA
AGTAATAGCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATATAAAACTG
                           AGTAATAGCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATATAAACTG
                                                                                                                                                                                                                                                           72.8%; Score 2081.4; DB 8; 99.5%; Pred. No. 1.9e-278; tive 2; Mismatches 8;
                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                      Length 2123;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NR12
                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                             Gaps
```

147

66

0

126

음 중

Ş

1048 GTTTTTCATAAAACACCTGAAACAGTTCCCCAGGTCACATCAAAAGCATTCCAACATGA 1107	208 CICTOGCCCACATTTIGGGTAGAACCAGCCACAATTTITAAGATGGTATGAATATCTCTAT 267
RESULT 2 US-11-274-375-9 US-11-274-375-9 ; Sequence 9, Application US/11274375 ; Publication No. US20060106201A1 ; GENERAL INFORMATION: ; APPLICANT: Maeda, Massatsugu ; APPLICANT: Yaguchi, NOTIKO ; TITLE OF INVENTION: NOVEL HEMOPOIETIN RECEPTOR PROTEIN, NR12 ; FILE REFERENCE: 06501-105US1 ; CURRENT APPLICATION NUMBER: US/11/274,375 ; CURRENT FILING DATE: 2005-11-14 ; PRIOR APPLICATION NUMBER: US/10/105,930 ; PRIOR FILING DATE: 2002-03-25 ; PRIOR APPLICATION NUMBER: US/10/06654 ; PRIOR APPLICATION NUMBER: US/06654 ; PRIOR APPLICATION NUMBER: JP 2000-240397 ; PRIOR FILING DATE: 2000-08-03	Db 1267 GTTANTACADAGTGGCTTANTANGATATTATTCCATANACACCATATTTCT 1407 Qy 1348 ANTGCTACAGGANATATGGACTTATTCATATTCTANATTCCAGGACAAAACACCATATTCT 1407 Db 127 ANTGCTACAGGANATATATGACTTATGACTAATTCTCAGGACACAAAACACAAAATTCTCATTATATTCCAGGACAAAATTATTCCAGGACAAAATTCTCAGGACAAAATTATTCCAGGACAAAATTATTCCAGGACAAAATTATTCCAGGACAAAATTATTCCAGGACAAAATTATTCCAGGACAAAAAATTATTCCAGGACAAAAAAAA

B & B & B

8 8 8

음 성 음

ફ

```
; PRIOR APPLICATION NUMBER: JP 11-273358
; PRIOR FILLING DATE: 1999-09-27
; NUMBER OF SEQ ID NOS: 77
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 9
; SEQ ID NO 9
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)...(1887)
US-11-274-375-9
                                                                                                                                                                                                                                                                                                                                                                                            us;
                                                                                                                                                                                                                                                                                                                                                                 Query Match 66.7%;
Best Local Similarity 99.8%;
Matches 1906; Conservative
                                                                                                                                                                                                                                                                                                                                       779
781
                                                  661
                                                                          601
                                                                                     719
                                                                                                   541
                                                                                                                             481
                                                                                                                                          599
                                                                                                                                                      421
                                                                                                                                                                                361
                                                                                                                                                                                            479
                                                                                                                                                                                                          301
                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                               359
                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                        299
                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                               ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACTCT
                                                                                                  CATGTGAAGAGTTTAGAGACAGAAGAAGAAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                      TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                  AATAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                           ATTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAGTTAAGAACTGCCAA
                                                                                                                                                                                                                                                                                                                                                                 Score 1906; DB 8;
Pred. No. 2.6e-254;
2; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                   0;
            958
                                                                                                                                                      480
                                                                                                                                                                                                                       478
                                                                                                                                                                                                                                                418
                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                        60
                         780
                                     898
                                                 720
                                                             838
                                                                           660
                                                                                                    600
                                                                                                                718
                                                                                                                             540
                                                                                                                                          658
                                                                                                                                                                    598
                                                                                                                                                                                420
                                                                                                                                                                                             538
                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                  298
                                                                                                                                                                                                                                                                                                                            238
                                      중 음 중
                                                                           음 성
                                                                                                      음 성
                                                                                                                               유성
                                                                                                                                                         음 성
                                                                                                                                                                                     음 성
                                                                                                                                                                                                                음 성 음
                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                 음 성 음
                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                     멼
                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                           ₽
                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                           음 중
                                                                                                                                                                                                                                                                                                                                                                                                                                                 음 성
      밁
              Ś
                             밁
                  1979
                               1801
                                           1919
                                                                    1859
                                                                                 1681
                                                                                             1799
                                                                                                          1621
                                                                                                                       1739
                                                                                                                                    1561
                                                                                                                                               1679
                                                                                                                                                              1501
                                                                                                                                                                         1619
                                                                                                                                                                                       1441
                                                                                                                                                                                                   1559
                                                                                                                                                                                                                                          1321
                                                                                                                                                                                                                                                      1439
                                                                                                                                                                                                                                                                   1261
                                                                                                                                                                                                                                                                                            1201
                                                                                                                                                                                                                                                                                                                                  1259
                                                                                                                                                                                                                                                                                                                                               1081
                                                                                                                                                                                                                                                                                                                                                            1199
                                                                                                                                                                                                                                                                                                                                                                                     1139
      1861
                                                                                                                                                                                                                                                                                                                                                                                                               1079
                                                                                                                                                                                                                                                                                                                                                                                                                                        1019
                                                                                                                                                                                                                                                                                           CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                                                                                                                                                                                                               ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                           GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
      TTCAATAGGATTTCACTCTTGGAAAAGTAGAGCTGTGTGGTCAAAATCAA 2028
                               AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC
                                                                                AGCAACACATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                   AACACTGGATATAAACCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAAT
                                                                                                                                                                                                               AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                                                                                      CAGGTCACATCAAAAGCATTCCAACATGACACGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                          CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                    1618
                                                                                                                                                                                                                                                                                                                                                                                                   1020
                                            1978
                                                                                                                                     1620
                                                                                                                                                                           1678
                                                                                                                                                                                        1500
                                                                                                                                                                                                                                          1380
                                                                                                                                                                                                                                                                                                                                    1318
                                                                                                                                                                                                                                                                                                                                                                          1080
                                 1860
                                                        1800
                                                                     1918
                                                                                                           1680
                                                                                                                                                              1560
                                                                                                                                                                                                                 1440
                                                                                                                                                                                                                             1558
                                                                                                                                                                                                                                                                                              1260
                                                                                                                                                                                                                                                                                                          1378
                                                                                                                                                                                                                                                                                                                       1200
                                                                                                                                                                                                                                                                                                                                                1140
                                                                                                                                                                                                                                                                                                                                                             1258
                                                                                                                                                                                                                                                                                                                                                                                                                              960
                                                                                                                                                                                                                                                                                                                                                                                                                                          1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                      900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1018
```

S

ঠ 문

당 성 당 성 당

유 성 유

유

8 8 8 8 8 8

8 8 8 8

유

밁

```
Sequence 3, Application US/11274375

Publication No. US20060106201A1

PUBLICANT: Maeda, Masatsugu

APPLICANT: Maguchi, Noriko

ITITE OF INVENTION: NOVEL HEMOPOIETIN RECEPTOR PROTEIN, NR1

PILE REFERENCE: 06501-105US1

CURRENT PILING DATE: 2005-11-14

PRIOR APPLICATION NUMBER: US/10/105,930

PRIOR APPLICATION NUMBER: US/10/105,930

PRIOR APPLICATION NUMBER: PCT/JP00/06654

PRIOR APPLICATION NUMBER: UP 2000-240397

PRIOR APPLICATION NUMBER: UP 2000-240397

PRIOR APPLICATION NUMBER: JP 2000-240397

PRIOR APPLICATION NUMBER: JP 11-273358

PRIOR FILING DATE: 2000-08-03

PRIOR FILING DATE: 1999-09-27

SOPTWARE: FastSEQ for Windows Version 4.0
                                                                                             श्
                                                                                                                                   밁
                                                                                                                                                         8
                                                                                                                                                                                          밁
                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                       र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-11-274-375-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 1324;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 1479
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (98)...(1381)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 3
      547
                                                                     487
                                                                                                   805
                                                                                                                                                                    448
                                                                                                                                                                                                    367
                                                                                                                                                                                                                                    388
                                                                                                                                                                                                                                                                                                  328
                                                                                                                                                                                                                                                                                                                                   247
                                                                                                                                                                                                                                                                                                                                                                                                 187
                                                                                                                                                                                                                                                                                                                                                                                                                                208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28 CAGCCAACAAGGGTGGCAGCCTGGGCTCTGAAGTGGGAATTATGTGCTTCAAACAGGTTGAA
     AGTAACCTGTGTCATTTATGAATATTCAGGCAACATGACTTGCACCTGGAATGCTRGGAA
                                                                                                                                                      AGAGACACTGATATGTGGAAAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGA
                                                                                                                                                                                                                        CATCAAAGAAAGATTTCAAATCACAAGGATTAATAAAACAACAGCTCGGCTTTGGTATAA
                                                                                                                                                                                                                                                                                                                                   ATATTGCCAAGCAGCAATTAAGAACTGCCAACCAAGGAAACTTCATTTTTATAAAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                    CTCTGGCCACATCTGGGTAGAACCAGCCACAATTTTTAAGATGGGTATGAATATCTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGTAATAGCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATATAAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGAGGGAAACAGTCTTTTCCTGCTTCCAGACATGAATCAKGTCACTATTCAATGGGATGC
                                                                       AGTAACCTGTGTCATTTATGAATATTCAGGCAACATGACTTGCACCTGGAATGCTGGGAG
                                                                                                                                                                                                     CATCAAAGAAAGATTTCAAATCACAAGGATTAATAAAAACAACAGCTCGGCTTTGGTATAA
                                                                                                                                                                                                                                                                                                                                                                   ATATTGCCAAGCAGCAATTAAGAACTGCCAACCAAGGAAACTTCATTTTTATAAAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                   CTCTGGCCACATCTGGGTAGAACCAGCCACAATTTTTAAGATGGGTGTGAATATCTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTAATAGCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATATAAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGAGGGAAACAGTCTTTTCCTGCTTCCAGACATGAATCAGGTCACTATTCAATGGGATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGTGGAATTATGTGCTTCAAACAGGTTGAA
                                                                                                                                     AGAGACACTGATATGTGGAAAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             46.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1322.8; DB 8;
Pred. No. 4.8e-174;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ٥,
                                                                                                                                                                                                                                      447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99
                                     627
                                                                       546
                                                                                                     567
                                                                                                                                     486
                                                                                                                                                                                                     426
                                                                                                                                                                                                                                                                                                                                   306
                                                                                                                                                                                                                                                                                                                                                                   327
                                                                                                                                                                                                                                                                                                                                                                                                                                 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                126
      606
                                                                                                                                                                     507
                                                                                                                                                                                                                                                                                                                                                                                                   246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
Sequence 7, Application US/11274375

Sequence 7, Application WS/20060106201A1

Publication No. US20060106201A1

APPLICANT: Medda, Mesatsugu

APPLICANT: Yaguchi, Noriko

TITLE OF INVENTION: NOVEL HEMOPOIETIN RECEPTOR PROTEIN, NR1

FILE REFERENCE: 06501-105US1

CURRENT APPLICATION NUMBER: US/11/274,375

CURRENT APPLICATION NUMBER: US/11/105,930

PRIOR APPLICATION NUMBER: US/10/105,930

PRIOR FILING DATE: 2002-03-25

PRIOR APPLICATION NUMBER: PCT/JP00/06654

PRIOR APPLICATION NUMBER: D7 2000-240397

PRIOR APPLICATION NUMBER: JP 2000-240397

PRIOR FILING DATE: 2000-08-03

PRIOR FILING DATE: 2000-08-03

PRIOR FILING DATE: 1999-09-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                   RESULT 4
US-11-274-375-7
                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1168
                                                                                                                                                                                                                                                                                                                                                                                                                  1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCTTTGATTGGGATATTTAACAGATCATTCCGAACTGGGATTAAAAAGAAGGATCTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGAGGAGACATTGGACTTTTATTGGGAATGATCGTCTTTGCTGTTATGTTGTCAATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGTTTCCTGTGAAATGAGATACAAGGCTACAACCAAACCAAACTTGGAATGTTAAAGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAAATTCACCTGGATGATATAGTGATACCTTCTGCAGCCGTCATTTCCAGGGCTGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAGTACTTGGTTTTGGGTCCAAGCAGCAAACGCACTAGGCATGGAAGAGTCAAAACAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAACAGTATCTCACCTCAAGCTATATTAACATCTCCACTGATTCATTACAAGGTGGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCAACAGTATCTCACCTCAAGCTATATTAACATCTCCACTGATTCATTACAAGGTGGCAA
                                                                                                                                                                                                                                                                                                                                                                                  AATGCTACAG 1357
                                                                                                                                                                                                                                                                                                                                                                                                                                      GTTAATACCAAAGTGGCTTTATGAAGATATTCCTAATATGAAAAACAGCAATGTTGTGAA 1347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTTTTTTCATAAAACACCTGAAACAGTTCCCCCAGGTCACATCAAAAGCATTCCAACATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTTTTTTCATAAAACACCTGAAACAGTTCCCCCAGGTCACATCAAAAGCATTCCAACATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGTATTTCAAGTGAGATGTCAAGAAACAGGCAAAAGGTACTGGCAGCCTTGGAGTTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TATAAATGCTACAGTGCCCAAGACCATAATTTATTGGGATAGTCAAACAACAATTGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCAAATTCACCTGGATGATAGTGATACTTTCTGCAGCCGTCATTTCCAGGGCTGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAGTACTTGGTTTGGGTCCAAGCAGCAAACGCACTAGGCATGGAAGAGTCAAAACAACT
                                                                                                                                                                                                                                                                                                                                                     AATGCTACAG
                                                                                                                                                                                                                                                                                                                                                                                                                  GTTAATACCAAAGTGGCTTTATGAAGATATTCCTAATATGAAAAACAGCAATGTTGTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCTTTGATTGGGATATTTAACAGATCATTCCGAACTGGGATTAAAAGAAGGATCTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGAGGAGACATTGGACTTTATTGGGAATGATCGTCTTTGCTGTTATGTTGTCAATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGTATTTCAAGTGAGATGTCAAGAAACAGGCAAAAGGTACTGGCAGCCTTGGAGTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGTTTCCTGTGAAATGAGATACAAGGCTACAACAAACCAAACTTGGAATGTTAAAGAATT
                                                                                                                                                                                                                                                                                                                                                     1336
```

1047

966

906 927 846 867 786 807 726 747 999

1287

1206

1266

```
; LENGTH: 1301
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
LOCATION: (1)...(1284)
US-11-274-375-7
                                                                                                                                            S
                                                                                                                                                                                               밁
                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                      뭐
                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                             용. 성
                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                         ક
                                                                                          문
                                                                                                          S
                                                                                                                               문
                                                                                                                                                                  밁
                                                                                                                                                                                 ક
                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                          S
                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 43.3%;
Best Local Similarity 99.8%;
Matches 1236; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 77
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 7
                                                                                                                                                                                                                                                                                          479
                                                                                                                                                                                                                                                                                                           301
                                                                                                                                601
                                                                                                                                                                   541
                                                                                                                                                                                                     481
                                                                                                                                                                                                                     599
                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                             419
                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     839
                                                                                               661
                                                                                                                                                                                    659
                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                               359
                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                 299
          959
                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                                                                   ATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                           ATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAGTAATTAAGAACTGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                               AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                            ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                    ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                               TATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                         TATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                          TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                    TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                           TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                    TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                                               2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 1236.6; DB 8;
Pred. No. 3.6e-162;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1301;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <u>.</u>
           1018
                                                                                                                                                                                                                                                                                                                                                                                                                                     298
                            840
                                             958
                                                               780
                                                                                               720
                                                                                                                                                                    600
                                                                                                                                                                                                     540
                                                                                                                                                                                                                      658
                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                              478
                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                418
                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                                                                                  778
           밁
                        S
                                             밁
                                                           S
                                                                               밁
                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
```

```
US-11-274-375-1

Sequence 1, Application US/11274375

Publication No. US20060106201A1

GENERAL INFORMATION:
APPLICANT: Maeda, Masatsugu
APPLICANT: Yaguchi, NOriko
FILE REFERENCE: 06501-105US1
CURRENT APPLICATION NUMBER: US/11/274,375
CURRENT FILING DATE: 2005-11-14
PRIOR APPLICATION NUMBER: US/10/105,930
PRIOR FILING DATE: 2002-03-25
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: PCT/JP00/06654
PRIOR APPLICATION NUMBER: JP 2000-240397
PRIOR APPLICATION NUMBER: JP 2000-240397
PRIOR APPLICATION NUMBER: JP 2000-240397
PRIOR FILING DATE: 2000-08-03
PRIOR FILING DATE: 1999-09-27
NUMBER OF SEQ ID NOS: 77
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1
LENGTH: 1784
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (98)...(1108)
US-11-274-375-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 5
US-11-274-375-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                 Query Match 36.4
Best Local Similarity 99.3
Matches 1041; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                841 GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
 127
                                    148
                                                                                                                                             67
                                                                      AGAGGGAAACAGTCTTTTCCTGCTTCCAGACATGAATCAKGTCACTATTCAATGGGATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCGTCTTTGCTGTTAIGTTGTCAATTCTTTGTTAGTTGGGATATTTAACAGATCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAG 1357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAAAACAGTTCCC
AGTAATAGCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATATAAACTG
                        AGTAATAGCCCTTTACATACTCTTCAGCTGGTGTCATGGAGGAATTACAAATATAAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                   36.4%;
                                                                                                                                                                                                                 Score 1039.2; DB 8; pred. No. 4.8e-135; 2; Mismatches 5;
                                                                                                                                                                                                                                                      DB 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROTEIN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1239
                                                                                                                                                                                                                                                      Length 1784;
                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1078
   186
                                                                        126
                                                                                                          147
                                                                                                                                               99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
```

```
RESULT 6
US-10-539-228-682
                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                      중 유
                                                                                                                                                                                                                                                                                                                                                                                          ક
                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ર્શ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           닭
Sequence 682, Application US/10539228

Publication No. US20060154250A1

GENERAL INFORMATION:

APPLICANT: David W. Morris

APPLICANT: Marc S. Malandro

TITLE OF INVENTION: Novel Compositions and Methods in Cancer

FILE REFERENCE: CHIR0052-101 (PP023370.0003)

CURRENT APPLICATION NUMBER: US/10/539,228

CURRENT FILING DATE: 2005-06-17

PRIOR APPLICATION NUMBER: US 10/322,281
                                                                                                                                                                                                                                                          967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             328
                                                                                                                                                                                                                                                                                    986
                                                                                                                                                                                                                                                                                                                 907
                                                                                                                                                                                                                                                                                                                                                                         847
                                                                                                                                                                                                                                                                                                                                                                                                  868
                                                                                                                                                                                                                                                                                                                                                                                                                                                        808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               187
                                                                                                                                                                                                                                                                                                                                             928
                                                                                                                                                                                                                                                                                                                                                                                                                              787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    727
                                                                                                                                                                                                  GTTTTTTCATAAAACACCTGAAACAGTT 1075
                                                                                                                                                                                                                                                                                                                                                                                        GGTTTCCTGTGAAATGAGATACAAGGCTACAACCAAACCAAACTTGGAATGTTAAAGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTCACCTACATAGACACAAAATACGTGGTACATGTGAAGAGTTTAGAGACAGAAGAAGA
                                                                                                                                                                                                                                                                          CGTATTTCAAGTGAGATGTCAAGAAACAGGCAAAAGGTACTGGCAGCCTTGGAGTTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAAGTACTTGGTTTGGGTCCAAGCAGCAAACGCACTAGGCATGGAAGAGTCAAAACAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGACACCAATTTTACATATGTGCAACAGTCAGAATTCTACTTGGAGCCAAACATTAAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATCAAAGAAAGATTTCAAATCACAAGGATTAATAAAACAACAGCTCGGCTTTGGTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATCAAAGAAAGATTTCAAATCACAAGGATTAATAAAACAACAGCTCGGCTTTGGTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATATTGCCAAGCAATTAAGAACTGCCAACCAAGGAAACTTCATTTTTATAAAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATATTGCCAAGCAGCAATTAAGAACTGCCAACCAAGGAAACTTCATTTTATAAAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCTGGCCACATCTGGGTAGAACCAGCCACAATTTTTAAGATGGGTATGAATATCTCTAT
                                                                                                                                                                                                                                                           CGTATTTCAAGTGAGATGTCAAGAAACAGGCAAAAGGTACTGGCAGCCTTGGAGTTCACT
                                                                                                                                                                                                                                                                                                                 TGACACCAATTTTACATATGTGCAACAGTCAGAATTCTACTTGGAGCCAAACATTAAGTA
                                                                                                                                                                                                                                                                                                                                                                         GGTTTCCTGTGAAATGAGATACAAGGCTACAACAAACCAAACTTGGAATGTTAAAGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                               TATAAATGCTACAGTGCCCAAGACCATAATTTATTGGGATAGTCAAACAACAATTGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                              TATAAATGCTACAGTGCCCAAGACCATAATTTATTGGGATAGTCAAACAACAATTGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAAATTCACCTGGATGATATAGTGATACTTTCTGCAGCCGTCATTTCCAGGGCTGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAAATTCACCTGGATGATATAGTGATACCTTCTGCAGCCGTCATTTCCAGGGCTGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAGTACTTGGTTTGGGTCCAAGCAGCAAACGCACTAGGCATGGAAGAGTCAAAACAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTCACCTACATAGACACAAAATACGTGGTACATGTGAAGAGTTTAGAGACAGAAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTAACCTGTGTCATTTATGAATATTCAGGCAACATGACTTGCACCTGGAATGCTGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGTAACCTGTGTCATTTATGAATATTCAGGCAACATGACTTGCACCTGGAATGCTRGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGAGACACTGATATGTGGAAAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGAGACACTGATATGTGGAAAAAGACATTTCTTCTTGGATATCCGGCCAGATATTCCTGATGA
                                                                                                                                                                                                                                                                                    1047
                                                                                                                                                                                                                                                                                                                 966
                                                                                                                                                                                                                                                                                                                                                                         906
                                                                                                                                                                                                                                                                                                                                                                                                                               846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               246
```

```
Ś
                                                                  밁
                                                                                               S
                                                                                                                                     문
                                                                                                                                                                  ঠ
                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-539-228-682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 2002-12-18
NUMBER OF SEQ ID NOS: 866
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 682
LENGTH: 36071
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 305; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                        32520 ÁCCACCCTGTACTATACAGAAGAAATGAAATTAAATTCTCATTGTTTTCAATAGAAATTG 32579
 32880
                                                                                                                                                                                                                                                                                                                                                                                  2528 ATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCATGCTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                      2468 AACAGCTCTCTATTGTGTACAGAAAGGGTAAATAATGCAAAATACCTGGTAGTAAAATAA 2527
                                                                                                                                                                                                                                                                                                                 AATCCCAGCACTTTGGTAGGCTGAGGTRGGTRGGATCACCTGAGGTCAGGAGTTCGAGTCC
                                  GAGCAMAACTCTGTCTGGAAAAAAAAAAAAAA 2859
GAGCAAGACTCCGTCTACAAAAAAAAAAAAA 32911
                                                                                      AGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGGGCAACAA 2827
                                                                                                                                       GTGGTGTGCGCCTGTAATCCCAGCCACTCGGGAGGCTGAGGCAGGAAAATCGCTTGAGCC
                                                                                                                                                           GTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACC
                                                                                                                                                                                                        AGCCTGGTCAACATGGGGAAACCCCCGTCTCTACTAAAAATACAAAAGTTAGCTGGGCATG
                                                                                                                                                                                                                                 AGCCTGGCCAATATGCTGAAAACCCTGTCTCTACTAAAATTTACAAAAAATTAGCCGGCCATG
                                                                                                                                                                                                                                                                              TGGGAGGCAGAGGTTGCAGTGAGCCGAGATCGTGCCACTGTACTCCAGCCTGGGTGACAA
                                                                                                                                                                                                                                                                                                                                                   AACATTTTTATCTTTGAAAAACAAAAATCTAGGCCAGGCGTGGTGGCTCACACCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8.9%;
77.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1; Mismatches 86;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 254; DB 6;
Pred. No. 2.7e-27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 36871;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                      32879
                                                                                                                                                                                                                                                                                                                 2647
                                                                                                                                         32819
                                                                                                                                                                                                                                                                              32699
                                                                                                                                                                                                                                                                                                                                                   32639
                                                                                                                                                                           2767
                                                                                                                                                                                                                                            2707
                                                                                                                                                                                                             3275
```

```
RESULT 7

US-11-330-648-46/c

Sequence 46, Application US/11330648

Publication No. US20060211015A1

GENERAL INFORMATION:
APPLICANT: Engelhard, Bric
APPLICANT: MOTTIS, David

TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR
FILE REFERENCE: 20366-042002

CURRENT APPLICATION NUMBER: US/11/330,648

CURRENT FILING DATE: 2006-01-12

PRIOR APPLICATION NUMBER: US 10/004,113

PRIOR APPLICATION NUMBER: US 09/747,377

PRIOR FILING DATE: 2001-10-23

PRIOR APPLICATION NUMBER: US 09/747,377

PRIOR FILING DATE: 2001-12-22

PRIOR PRILING DATE: 2001-03-02

NUMBER OF SEQ ID NOS: 61

SOPTWARE: Patentin version 3.1

SEQ ID NO 46

LENGTH: 44567

TYPE: DNA

ORGANISM: Homo mapiens
US-11-330-648-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                    FOR CANCER
```

ঠ

Query Match 8.7%; Best Local Similarity 78.5%; Matches 296; Conservative

1;

Score 248.6; DB 7; Pred. No. 1.4e-26; 1; Mismatches 80;

Indels Length

0; Gaps

0

```
APPLICANT: Duclett, Aymeric
APPLICANT: Bougueleret, Lydde
APPLICANT: Ebbets-Reed, Dana
APPLICANT: Ebbets-Reed, Dana
APPLICANT: Ebbets-Reed, Dana
APPLICANT: Eslected, Luisa
APPLICANT: Eslected, Luisa
APPLICANT: Eslected, Luisa
APPLICANT: Salter-Cid, Luisa
TITLE OF INVENTION: CEIL GROWTH
FILE REFERENCE: 89.USZ.CIP
FILE REFERENCE: 89.USZ.CIP
CURRENT FILING DATE: 2006-04-27
PRIOR APPLICATION NUMBER: US/10/121,034
PRIOR APPLICATION NUMBER: US/10/121,034
PRIOR APPLICATION NUMBER: US/09/750,580
PRIOR APPLICATION NUMBER: US 09/599,362
PRIOR APPLICATION NUMBER: US 09/599,362
PRIOR APPLICATION NUMBER: PCT/IB00/0101
PRIOR FILING DATE: 2000-06-21
PRIOR FILING DATE: 2000-06-21
PRIOR APPLICATION NUMBER: PCT/IB09/02058
PRIOR APPLICATION NUMBER: PCT/IB09/02058
PRIOR APPLICATION NUMBER: US 49/469/09
PRIOR APPLICATION NUMBER: US 49/469/09
PRIOR APPLICATION NUMBER: US 49/469/09
PRIOR APPLICATION NUMBER: US 40/113,686
PRIOR PILING DATE: 1999-12-21
PRIOR PILING DATE: 1999-12-22
PRIOR FILING DATE: 1998-12-22
PRIOR FILING DATE: 1998-12-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ર્ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-11-412-373-1/c
                                                                                                         NUMBER OF SEQ ID NOS
SOFTWARE: Patent.pm
SEQ ID NO 1
SEQ ID NO 1
LENGTH: 81001
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1, Application US/11412373 Publication No. US20060189793A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                     PRIOR APPLICATION NUMBER OF SEQ ID NOS: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Yen, Frances
APPLICANT: Denison, Bla
APPLICANT: Bour, Barbas
APPLICANT: Bihain, Berr
ORGANISM: Homo sapiens
FEATURE:
NAME/URY: misc_feature
LOCATION: 10946..12946
OTHER INFORMATION: 5'regulatory region
FEATURE:
                                                                                                                                                                                                                     APPLICATION NUMBER: US 60/141,032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2783 GCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGGGCAACAAGAGCAAAAACTCTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           410 GTGAAACCCCGTCTCTACTAAAAAATACAAAAATTAGCCGGGCATGGTGGCGGGTGCCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   590 TGTCTCAAAAAAAAAAAAAAAGAAAGGGAAAAAGGGGAATAACATCACATACCAACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGAAAAAAAAAAAA 2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGAAACCCTGTCTCTACTAAAATTACAAAAATTAGCCGGCCATGGTGGCAGGTGCTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTTCGAGTCCAGCCTGGCCAATATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTATAAAAATCCTTTTTCTAGACAGGCACCGTGGCTCATGCCTGTAATCCCAGCACTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCAGGAAGGCAGAGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCAAAAAAAAAAAAAA 214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCAGTGAGCTGAGACTGCACCATTGTACTCCAGCCTGGACAACAGAGCAAAACTCTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATTCCAGCTACTAGGAAGGCTGAGGCAGGGGAATCACTTGAACCCGGGAAGGCGGAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAGGCTGAGGTGGGTCACCTGAGGTCAGGAGTTCAAGCCCAGCCTGGCCAACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCATGCTTGTAATCCCAGCACTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bihain, Bernard
Dumas Milne Edwards,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bour, Barbara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Jean-Baptiste
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
FEATURE:
NAME/KEY: exon
13470..13526
                                                                                                                                                                                                                                                                         OTHER INFORMATION: 20-828.rj
FEATURE:
NAME/KEY: primer_bind
LOCATION: 12029..12050
OTHER INFORMATION: 17-42.pu
FEATURE:
NAME/KEY: primer_bind
LOCATION: 12581..12603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
NAME/KEY: allele
77058
                                                                                                                             NAME/KEY:
LOCATION:
                                FEATURE:
NAME/KEY: primer_bind
LOCATION: 42070..42090
OTHER INFORMATION: 20-841.pu
                                                                                                                                                                                 NAME/KEY: primer_bind
LOCATION: 14992..15012
OTHER INFORMATION: 17-41
                                                                                                                                                                                                                                        LOCATION: 12581. 12603
OTHER INFORMATION: 17-42
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: 13641..13752
OTHER INFORMATION: exon
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: 20-828. FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: allele
LOCATION: 1239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc_feature
LOCATION: 15969..17969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: 14271..15968
OTHER INFORMATION: exon
FEATURE:
                                                                                                           OTHER INFORMATION: 17-41.rp
                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: primer_bind LOCATION: 1357...1377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
NAME/KEY: primer_bind
LOCATION: 929..949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: 77058
OTHER INFORMATION: 20-853-415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION: 45442
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: allele
LOCATION: 42218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: allele
LOCATION: 15241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION: 15969..17
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION: 12947..12958
OTHER INFORMATION: exon 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PEATURE
primer_bind
                                                                                                                           primer_bind
15460..15482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..17969
ON: 3'regulatory region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-842-115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-841-149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-42-319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-41-250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-828-311
                                                                                                                                                                                  ġ
                                                                                                                                                                                                                                                            ij
                                                                                                                                                                                                                                                                                                                                   'n.
                                                                                                                                                                                                                                                                                                                                                                                                          ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'n.
                                                                                                             complement
                                                                                                                                                                                                                                                            complement
                                                                                                                                                                                                                                                                                                                                                                                                            complement

    polymorphic base

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  polymorphic base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           polymorphic base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    polymorphic base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              റ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ဂ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Or
T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               or
```

```
NAME/KEY: primer bind
LOCATION: 45863...45883
OTHER INFORMATION: 20-842.rp
                                                                    NAME/KEY: misc_binding
LOCATION: 1227..1251
OTHER INFORMATION: 20-828-311.probe
                                                                                                                                            LOCATION: 77059.77077
OTHER INFORMATION: 20-853-415.mis
FEATURE:
                                                                                                                                                                                      NAME/KEY: primer_bind
LOCATION: 77059..77077
                                                                                                                                                                                                                                                                                                                                               NAMS/KEY: primer bind
LOCATION: 45443.45461
OTHER INFORMATION: 20-842-115.mis complement
                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: primer bind
LOCATION: 45423..45441
OTHER INFORMATION: 20-842-115.mis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: primer_bind
LOCATION: 42199..42217
OTHER INFORMATION: 20-841-149.mis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: primer_bind
LOCATION: 15242..15260
OTHER INFORMATION: 17-41-250.mis complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: primer_bind
LOCATION: 15222..15240
OTHER INFORMATION: 17-41-250.mis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: primer_bind
LOCATION: 12348..12366
OTHER_INFORMATION: 17-42-319.mis complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: primer_bind
LOCATION: 12328..12346
OTHER INFORMATION: 17-42-319.mis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: primer bind LOCATION: 1240..1258
OTHER INFORMATION: 20-828-311.mis complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: primer_bind
LOCATION: 1220..1238
OTHER INFORMATION: 20-828-311.mis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: primer_bind
LOCATION: 77166..77185
OTHER_INFORMATION: 20-853.rp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: primer_bind
LOCATION: 76644..76664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: primer_bind
LOCATION: 45328..45347
NAME/KEY: misc binding LOCATION: 12335..12359
                                                                                                                                                                                                                                                          OTHER INFORMATION: 20-853-415.mis
                                                                                                                                                                                                                                                                                  NAME/KEY: primer_bind
LOCATION: 77039..77057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: 20-853.pu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION: 45328..45347
OTHER INFORMATION: 20-842.pu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION: 42572..42591
OTHER INFORMATION: 20-841.rp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: 20-841-149.mis complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: primer_bind
LOCATION: 42219..42237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      complement
                                                                                                                                                                complement
```

```
RESULT 9
US-10-669-920-341/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 341, Application US/10669920 Publication No. US20060194265A1 GENERAL INFORMATION:
                                      NUMBER OF SEQ ID NOS: 1441
SOFTWARE: FastSEQ for Wind
SEQ ID NO 341
LENGTH: 438732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 8.6%;
Best Local Similarity 86.6%;
Matches 271; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: MORRIS, David W.
APPLICANT: Malandro, Marc S.
TITLE OP INVENTION: NOVEL THERAPEUTIC TARGETS
FILE REFERENCE: 20366-066001
CURRENT APPLICATION NUMBER: US/10/669,920
CURRENT FILLING DATE: 2003-09-23
PRIOR APPLICATION NUMBER: US 10/004,113
                                                                                                                       PRIOR FILING DATE: 2002-12-17
PRIOR APPLICATION NUMBER: US 10/322,696
PRIOR FILING DATE: 2002-12-17
                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 2001-10-23
PRIOR APPLICATION NUMBER: US 10/052,482
PRIOR FILING DATE: 2001-11-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: 17-42-319.probe FEATURE: FEATURE: NAME/KEY: misc_binding LOCATION: 15229..15253
OTHER INFORMATION: 17-41-250.probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PEATURE:
NAME/KEY: misc binding
LOCATION: 42206..42230
OTHER INFORMATION: 20-841-149.probe
FEATURE:
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     64931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         64751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         64871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        64991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   65051 ATAAGGAAATTGTGTGGCCAGGTGCAGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAG
                                                                                                                                                                            FILING DATE: 2002-02-27
APPLICATION NUMBER: US 10/087,192
FILING DATE: 2002-03-01
APPLICATION NUMBER: US 10/322,281
                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 09/997,722 FILING DATE: 2001-11-30
                                                                                                                                                                                                                                              APPLICATION NUMBER: US 10/085,117 FILING DATE: 2002-02-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2667
                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 10/034,650 FILING DATE: 2001-12-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2547 AAAATAGAATCATTAGGCCAGGCGTGGTGGCTCATGCTTGTAATCCCCAGCACTTTGGTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AACCCTGTCTCTACTAAAATTACAAAAATTAGCCGGCCATGGTGGCAGGTGCTTGTAATC 2726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTTCGAGTCCAGCCTGGCCAATATGCTGA 2666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCAAGGTGGGTGGATCACCTGAGGTCAGGAGTTCGAGACCAGCCTGGCCAACATGGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAAAAAAACAAA 64739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAAAAAAAAA 2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAGCTACTTGGGAGGCTGAGGCAGGAGATCACTTGAACCAGGAAGGCAGAGGTTGCAC 2786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACCCCGTCTCTATTAAAAATACAAAAATTAGCCGGGCATGGTGGCAGGAGCCTGTAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGAGCTGAGATTGCGCCACTGCACTCCAGCCTGAGGGACAAGAGCGAGACTCTGTATCAA 64752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGAGCTGAGATTGTGCCACTGCACTCCAGCCTGGGCAACAAGAGCAAAAACTCTGTGTCTGGA 2846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 247; DB 7;
Pred. No. 2.1e-26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IN CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 81001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         64872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        64932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       64992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
```

```
APPLICANT: MALLI, FOUL
APPLICANT: MALLIGAN, FAUL
APPLICANT: Mulligan, Karl
ITILE OF INVENTION: Transcriptome Microarray Technology and
ITILE OF INVENTION: Methods of Using the Same
FILE REFERENCE: 55815-0102 (319189)
CURRENT FILING DATE: 2005-11-03
PRIOR APPLICATION NUMBER: EP 04105499.2
PRIOR APPLICATION NUMBER: EP 04105402.6
PRIOR FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: EP 04105483.4
PRIOR APPLICATION NUMBER: EP 04105483.4
PRIOR APPLICATION NUMBER: EP 04105483.4
PRIOR APPLICATION NUMBER: EP 04105483.9
PRIOR APPLICATION NUMBER: EP 04105483.9
PRIOR FILING DATE: 2004-11-03
PRIOR FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: EP 04105485.9
PRIOR APPLICATION NUMBER: EP 04105484.2
PRIOR APPLICATION NUMBER: EP 04105484.2
PRIOR APPLICATION NUMBER: EP 04105484.2
PRIOR APPLICATION NUMBER: BP 04105484.2
PRIOR APPLICATION NUMBER: US 60/662,276
PRIOR PILING DATE: 2005-03-14
PRIOR PILING DATE: 2005-03-14
PRIOR FILING DATE: 2005-07-18
PRIOR FILING DATE: 2005-07-18
PRIOR PILING DATE: 2005-07-18
                                                                                                                                          ; ORGANISM: Homo Sapiens
US-11-266-748A-292995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 10
US-11-266-748A-292995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; FEATURE:
, NAME/KEY: misc_feature
; LOCATION: (1)...(438732)
; OTHER INFORMATION: n = A,T,C
US-10-669-920-341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                      Query Match 8.6%;
Best Local Similarity 88.9%;
Matches 264; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 292995, Application US/11266748A Publication No. US20060134663A1 GENERAL INFORMATION:
APPLICANT: Harkin, Paul
                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 483996
SOFTWARE: PatentIn version 3
SEQ ID NO 292995
LENGTH: 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 266;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 8.6%;
Best Local Similarity 88.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           404717 TAGGCCAGGCGTGGTGGCTCACACCTGTAATCCCAGCACTTTGGGAGGCTGAGGCGAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    404657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2680 CTAAAATTACAAAAATTAGCCGGCCATGGTGGCAGGTGCTTGTAATCCCCAGCTACTTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2620 GATCACCTGAGGTCAGGAGTTCGAGTCCAGCCTGGCCAATATGCTGAAACCCTGTCTCTA 2679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2560 TAGGCCAGGCGTGGTGGCTCATGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTTGGTG
2563 GCCAGGCGTGGTGGCTCATGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGAT 2622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGCTGAGGCAGAAATCACTTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GATCACCTGAGGTCAGGAGTTTGCGACCAGCCTGGCCAACAGGGTGAAACCCCCGTCTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTAAAAATACAAAAATTAGCTGGGTGTGGTGGTGGCGCCTGTAATCCCAGCTACTCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; Score 246.8; DB 6; ; Pred. No. 1.6e-26; 1; Mismatches 33;
                                           :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유
                                         Score 245.4; DB 8;
Pred. No. 8.8e-26;
1; Mismatches 32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          33; Indels
                                                                                       Length 1000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 438732;
                                           Indels
                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ,
,
                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    404598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              404658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              404478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        404538
                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
```

```
APPLICANT: Johnston, Patrick
APPLICANT: Mulligan, Karl
ITILE OF INVENTION: Transcriptome Microarray Technology and
ITILE OF INVENTION: Methods of Using the Same
FILE REFERENCE: 55815-0102 (319189)
CURRENT FILING DATE: 2005-11-03
PRIOR APPLICATION NUMBER: US/11/266,748A
CURRENT FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: EP 04105402.6
PRIOR FILING DATE: 2004-11-03
PRIOR FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: EP 04105403.4
PRIOR FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: EP 04105403.9
PRIOR APPLICATION NUMBER: EP 04105405.9
PRIOR FILING DATE: 2004-11-03
PRIOR PRIOR APPLICATION NUMBER: EP 04105405.9
PRIOR PRIOR DATE: 2004-11-03
PRIOR APPLICATION NUMBER: EP 04105404.2
PRIOR PRILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: EP 04105404.2
PRIOR PRILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: EP 04105404.2
PRIOR PRILING DATE: 2005-03-14
PRIOR PILING DATE: 2005-03-14
PRIOR PILING DATE: 2005-03-14
PRIOR PILING DATE: 2005-07-16
                                                                                  밁
                             S
                                                                                                                          á
                                                                                                                                                                        片
                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                             ; TYPE: DNA
; ORGANISM: Homo Sapiens
US-11-266-748A-344424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-11-266-748A-344424/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 344424, Application US/11266748A publication No. US20060134663A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn version 3.3 SEQ ID NO 344424
                                                                                                                                                                                                                                                             Matches 264;
                                                                                                                                                                                                                                                                               Query Match 8.6%;
Best Local Similarity 88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 2005-03-14
PRIOR APPLICATION NUMBER: US 6
PRIOR FILING DATE: 2005-07-18
NUMBER OF SEQ ID NOS: 483996
NUMBER OF SEQ ID NOS: 483996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Harkin, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 1000
                                         2683
                                                                                                                                                                                                   2563 GCCAGGCGTGGTGGCTCATGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTTGGAT 2622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2623
                                                                                                                                                                          794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 207
                                                                                  AAATTACAAAAATTAGCCGGCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGG 2742
                                    AAATTACAAAAATTAGCCGGCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGG 2742
                                                                                                                                                                          CTGAGGCAGGAGAATCACTTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGC 2802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACCTGAGGTCAGGAGTTCGAGTCCAGCCTGGCCAATATGCTGAAACCCTGTCTCTACTA 2682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATCTGAGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGATGAAACCCCCGTTTCTACTA 326
AAAATACAAAATTAGCCAGGCGTGGTGATGGGTGCCTGTAATCCCAGCTACGTGGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGAGGCAGGAGAATCACTTGAACCCAGAAGGTGCAGGTTGCAGTGAGCTGAGATCGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAATACAAAATTAGCCAGGCGTGGTGATGGGTGCCTGTAATCCCCAGCTACGTGGGAGG
                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                        Score 245.4; DB 8; Pred. No. 8.8e-26; 1; Mismatches 32;
                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                    Length 1000;
                                                                                                                                                                                                                                                             <u>.</u>.
                                                                                                                                                                                                                                                             Gaps
615
                                                                                                                                                                          735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    386
                                                                                                                                                                                                                                                          0;
```

```
RESULT 13
US-11-266-748A-475925/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-11-266-748A-404879
US-2010 US-11-266748A
Publication US-20060134663A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                              ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: EP 04105479.2
PRIOR FILLING DATE: 2004-11-03
PRIOR PELLORITON NUMBER: EP 04105482.6
PRIOR PELLORITON NUMBER: EP 04105483.4
PRIOR APPLICATION NUMBER: EP 04105483.4
PRIOR APPLICATION NUMBER: EP 04105507.0
PRIOR APPLICATION NUMBER: EP 04105507.0
PRIOR PILLING DATE: 2004-11-03
PRIOR PILLING DATE: 2005-03-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 404879
LENGTH: 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Harkin, Paul
APPLICANT: Johnston, Patrick
APPLICANT: Johnston, Patrick
APPLICANT: Mulligen, Karl
TITLE OF INVENTION: Transcriptome Microarray Technology and
TITLE OF INVENTION: Methods of Using the Same
FILE REFERENCE: 55815-0102 (319189)
CURRENT APPLICATION NUMBER: US/11/266,748A
CURRENT FILING DATE: 2005-11-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 2005-07-18
NUMBER OF SEQ ID NOS: 483996
SOFTWARE: Patentin version 3.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo Sapiens
11-266-748A-404879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: US 60/700,293 PRIOR FILING DATE: 2005-07-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Match 8.6%;
Local Similarity 88.9%;
tes 264; Conservative
                                                                                                                  447
                                                                                                                                                                                                                                                                                                                                                                                                CACCTGAGGTCAGGAGTTCGAGTCCAGCCTGGCCAATATGCTGAAAACCCTGTCTCTACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAATTACAAAAATTAGCCGGCCATGGTGGCAGGTGCTTGTAATCCCCAGCTACTTGGGAGG
                                                                                                                                                                                                                                                                                                                                                           CATCTGAGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGATGAAAACCCCGTTTCTACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGAGGCAGGAGAATCACTTGAACCCAGAAGGTGCAGGTTGCAGTGAGCTGAGATCGTGC
                                                                                                                                                                                                        CTGAGGCAGGAGAATCACTTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGC
                                                                                                                                                                                                                                                                       AAAATACAAAAATTAGCCAGGCGTGGTGATGGGTGCCTGTAATCCCAGCTACGTGGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGAGGCAGGAGAATCACTTGAACCCAGAAGGTGCAGGTTGCAGTGAGCTGAGATCGTGC 555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGAGGCAGGAGAATCACTTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGC 2802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 245.4; DB 8;
Pred. No. 8.8e-26;
1; Mismatches 32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                       386
                                                                                                                                                                                                                                                                                                                 2742
                                                                                                                                                                                                                                                                                                                                                                                                       2682
                                                                                                                                                                                 446
                                                                                                                                                                                                                                                                                                                                                             326
                                                                                                                                                                                                                                                                                                                                                                                                                                                    266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
```

```
PRIOR APPLICATION NUMBER: EP 04105485.9
PRIOR FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: EP 04105484.2
PRIOR FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: US 60/662,276
PRIOR ETLING DATE: 2005-03-14
PRIOR APPLICATION NUMBER: US 60/700,293
PRIOR APPLICATION NUMBER: US 60/700,293
PRIOR PILING DATE: 2005-07-18
NUMBER OF SEQ ID NOS: 483996
SOFTWARE: PATENTIN VETSION 3.3
SEQ ID NO 475925
US-10-540-898-374
Sequence 374, Application US/10540898
Publication No. US20060166213A1
GENERAL INFORMATION:
                                                                                                                                                                                             S
                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: DNA
; ORGANISM: Homo Sapiens
US-11-266-748A-475925
                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 475925, Application US/11266748A
Publication No. US20060134663A1
GENERAL INFORMATION:
APPLICANT: Harkin, Paul
APPLICANT: Johnston, Patrick
APPLICANT: Mulligan, Karl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 264;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Transcriptome Microarray Technology and TITLE OF INVENTION: Methods of Using the Same FILE REFERENCE: 55815-0102 (319189)

CURRENT APPLICATION NUMBER: US/11/266,748A

CURRENT FILING DATE: 2005-11-03

PRIOR APPLICATION NUMBER: EP 04105479.2

PRIOR PILING DATE: 2004-11-03

PRIOR APPLICATION NUMBER: EP 04105482.6

PRIOR APPLICATION NUMBER: EP 04105483.4

PRIOR APPLICATION NUMBER: EP 04105483.4

PRIOR FILING DATE: 2004-11-03

PRIOR FILING DATE: 2004-11-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: EP 04105507.0 FILING DATE: 2004-11-03
                                                                                                                                                                                2743
                                                                                                                                                                                                                                                                                                                                                                       2683
                                                                                                                                                                                                                                                                                                                                                                                                                                                               2623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2563 GCCAGGCGTGGTGGCTCATGCTTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGAT
                                                                                                                                                                                                                                             614
                                                                                                                                                                                                                                                                                                                                  674
                                                                                                                                                                                                                                                                                                                                                                                                                    734 CATCTGAGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGATGAAACCCCCGTTTCTACTA 675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1000
                                                                                                                                                                                                                                                                   CTGAGGCAGGAGAATCACTTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGC 2802
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACCTGAGGTCAGGAGTTCGAGTCCAGCCTGGCCAATATGCTGAAACCCTGTCTCTACTA 2682
                                                                                                                                                                                                                                                                                                                                                       AAATTACAAAAATTAGCCGGCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGG 2742
                                                                                                                                                       AAAATACAAAATTAGCCAGGCGTGGTGATGGGTGCCTGTAATCCCAGCTACGTGGGAGG
                                                                                                                                                                                                                                             CTGAGGCAGGAGAATCACTTGAACCCAGAAGGTGCAGGTTGCAGTGAGCTGAGATCGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 245.4; DB 8;
Pred. No. 8.8e-26;
1; Mismatches 32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 1000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                  615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2622
```

APPLICANT: David W. Morris
APPLICANT: Marc Malandro
ITILE OF INVENTION: NOVel Compositions and Methods
FILE REFERENCE: CHIR0056-101 (PP023367.0003)
CURRENT APPLICATION NUMBER: US/10/540,898
CURRENT FILING DATE: 2005-06-27
PRIOR APPLICATION NUMBER: US 10/330,773
PRIOR FILING DATE: 2002-12-27

ä

Cancer

```
APPLICANT: MOTATION:
APPLICANT: MALANTON: NOVEL THEAPEUTIC TARGETS IN CANCER TITLE OF INVENTION: NOVEL THEAPEUTIC TARGETS IN CANCER FILE REFERENCE: 2036-066001
CURRENT APPLICATION NUMBER: US/10/669,920
CURRENT FILING DATE: 2003-09-23
PRIOR FILING DATE: 2001-10-23
PRIOR FILING DATE: 2001-10-23
PRIOR FILING DATE: 2001-11-08
PRIOR APPLICATION NUMBER: US 10/052,482
PRIOR FILING DATE: 2001-11-30
PRIOR PRILING DATE: 2001-11-30
PRIOR PRILING DATE: 2001-11-30
PRIOR FILING DATE: 2001-12-20
PRIOR APPLICATION NUMBER: US 10/034,650
PRIOR FILING DATE: 2001-12-20
PRIOR FILING DATE: 2001-12-20
PRIOR FILING DATE: 2002-03-01
PRIOR APPLICATION NUMBER: US 10/087,192
PRIOR APPLICATION NUMBER: US 10/322,281
PRIOR APPLICATION NUMBER: US 10/322,696
PRIOR FILING DATE: 2002-12-17
PRIOR APPLICATION NUMBER: US 10/322,696
PRIOR FILING DATE: 2002-12-17
PRIOR APPLICATION NUMBER: US 10/322,696
PRIOR FILING DATE: 2002-12-17
PRIOR PRIOR APPLICATION NUMBER: US 10/322,696
PRIOR FILING DATE: 2002-12-17
PRIOR PRIOR APPLICATION NUMBER: US 10/322,696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; FEATURE:

NAME/KEY: misc_feature

; LOCATION: (1)...(22587)

; OTHER INFORMATION: n = A,T,C

US-10-540-898-374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-669-920-1403/c
Sequence 1403, Application US/10669920
Publication No. US20060194265A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 981
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 374
LENGTH: 225587
TYPE: DNA
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1403
LENGTH: 84105
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 8.6%;
Best Local Similarity 84.8%;
Matches 273; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         139877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   139817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     139757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          139697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2837 TCTGTCTGGAAAAAAAAAAAA 2858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTCATCTCAAAAAAAAAAAAA 139958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGGTTGCAGTGAGCCGAGACCGCGCCATTGCACTCCAGCCTGGGCAACAAGAGCAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGGGCAACAAGAGCAAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCCTGTAATCCCAGCTACCTGGGAGGCTGAGACAGGGGAATCACTTGAACCCGGGAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCAGGAAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AACATGGTGAAACCCTGTCTCTACTAAAAATACAAAAATTAGCCAGGCACGGTGGTACAT 139816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATATGCTGAAACCCTGTCTCTACTAAAATTACAAAAATTAGCCGGCCATGGTGGCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTITIGAGAGGCTCAGGCGGGCGGATCACCTGAGGTCAGGAGTTCGAGACCAGCCTGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTTCGAGTCCAGCCCTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; Score 244.8; DB 6; Length 225587; Pred. No. 3.5e-26; 1; Mismatches 48; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               139936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   139876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              139696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

```
밁
                                                                                     ঠ
                                                                                                                         밁
                                                                                                                                                   á
                                                                                                                                                                                       뭐
                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Homo sapiens US-10-669-920-1403
밁
                           Ś
                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 85.0 Matches 272; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                         69139 CTGTAATCCCAGATACTTGGGAGGCTGAGGCAGGAGAATCGCTTGAACACGGGAGGCAGA
                                                                                                                                                                                       69319
                                                                                                                                                         2719
                                                                                                                                                                                                                     2659 TATGCTGAAACCCTGTCTCTACTAAAATTACAAAAATTAGCCGGCCATGGTGGCAGGTGC
                                                                                                                                                                                                                                                                                2599 TTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTTCGAGTCCAGCCTGGCCAA
                                                                                                                                                                                                                                                                                                                                             2539 TTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCATGCTTGTAATCCCAGCAC
                                                                                                                                                                                                                                               ATTGGGAGGCCGAGGCGGATCACCTGAGGTCAGGAGTTCAAGACCAGCCTGGCCAA
                      TGTCTGGAAAAAAAAAAAA 2858
                                                                                  GGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGGGCAACAACAAGAGCAAAAAACTC
                                                                                                                                                TTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCAGGAAGGCAGA
TGTCTCAAAAAAAAAAAAA 69000
                                                             GGTTGCAGTGAGCTGAGATCGTGCCATTGCACTTCAGCCTGGGCAACAAGAGTGAAACTC
                                                                                                                                                                                                                                                                                                                  TTTACTTAAAAAAAAGAAAAATAGGCTGGCGCGCGCGCTCACGCCTGTAATCCCCCACAC
                                                                                                                                                                                                                                                                                                                                                                                         8.6%;
                                                                                                                                                                                                                                                                                                                                                                           Score 244.4; DB 6;
Pred. No. 4.8e-26;
1; Mismatches 47;
                                                                                                                                                                                                                                                                                                                                                                                                           Length 84105;
                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                              ..
                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                            2838
                                                                                                                                                         2778
                                                                                                                                                                                                                       2718
                                                                                                                                                                                                                                                                                   2658
                                                                                                                                                                                                                                                                                                                                                 2598
                                                               69020
                                                                                                                            69080
                                                                                                                                                                                        69140
                                                                                                                                                                                                                                                    69200
                                                                                                                                                                                                                                                                                                                  69260
                                                                                                                                                                                                                                                                                                                                                                              0
```

Search completed: October 14, 2006, 14:44:00 Job time: 573 secs

This Page Blank (Uspto)

```
Run
                                                                           Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Command line parameters:

-MODEL-frame+ p2n.model -DEV=xlh
-MODEL-frame+ p2n.model -DEV=xlh
-Q-/abss/ABSSWEB gpool/US10667289/runat 13102006 111531 24352/app query.fasta_1
-Q-/abss/ABSSWEB gpool/US10667289/runat 13102006 111531 24352/app query.fasta_1
-DB=N Geneseq -GFWT=fastap -SUPFIX=p2n.rng -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0
-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45
-DOCALLIGN=200 -THR, SCORE-pct -THR MAX=100 -THR MIN=0 -ALIGN=15 -MODE=LOCAL
-OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXIEN=2000000000 -HOST=abs802h
-USER=US10667289 @CGN 1 1 761 @runat 13102006 111531 24352 -NCPU=6 -ICPU=3
-NORMAP -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV_TIMEOUT=120
-WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 B
                                                                             Score
  3324
3324
3324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     seq length:
seq length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Xgapop 10.0 , 1
Ygapop 10.0 , 1
Fgapop 6.0 , 1
Delop 6.0 , 1
                                                                           Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-667-289-2
3326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        October 14, 2006, 14:05:08; Search time 1043 Seconds (without alignments) 6307.111 Million cell updates/sec
                                                                                                                                                                                                                                                     11:
12:
13:
14:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5244920 seqs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BLOSUM62
                                                                                                                                                                                                                                                                                                                                                    10:
  99.9
99.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Geneseq 8:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MNXVTIQWDAVIALYILFSW.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Copyright
                                                                                                                                                                                                                                                                                                                          geneseqn2003bs:*
geneseqn2003cs:*
geneseqn2003ds:*
                                                                                                                                                                                                                                                 geneseqn2004as:*
geneseqn2004bs:*
geneseqn2005s:*
geneseqn2006s:*
                                                                                                                                                                                                                                                                                                                                                                                         geneseqn2003as:*
                                                                                                                                                                                                                                                                                                                                                                                                       geneseqn2002bs:*
                                                                                                                                                                                                                                                                                                                                                                                                                             geneseqn2002as:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        geneseqn2000s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        geneseqn1990s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               geneseqn1980s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                 geneseqn2001bs:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    geneseqn2001as:*
                                                                           Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000000000
  2859
2859
2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GenCore version 5.1.9 (c) 1993 - 2006 Biocceleration Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Xgapext
Ygapext
Fgapext
Delext
  6
13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3486124231 residues
AAK98257
3 ADS73604
4 AEA51089
                                                                             ä
                                                                                                                                   SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.5
7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYFPQNILESHFNRISLLEK 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10489840
Aak98257 Human DNA
Ads73604 Human IL-
Aea51089 Human DNA
                                                                           Description
```

	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	221	225.5	25	250	n	256.5	an.	286	695	747	747	747	868	39	039	039	175	2192	0.5	747	952	292	314	μ	314	
;	•	6.5	٠	6.5	•			•		٠			•		•	•	٠	٠			٠	7.7	٠	٠	8.6	۲	.2	Ņ	52.5	•	\mathbf{r}	-	۲	5	5	œ.	N	œ	9	٠	99.6	9	•
	4040	4040	4040	4040	4040	4040	4040	4040	4040	4040	4040	4040	4040	4040	3400	3400	2589	4023	3053	3053	412	2995	2995	2995	360	1784	1152	1152	1152	1071	1155	1155	1155	1479	0	1935	1887	1698	2123	2830	1910	1890	•
	5	14	14	14	13	12	11	10	10	10	6			N	12	12	14	σ	13	10	4	13	w		ហ			10	4.	Q	14	10				0	σ	თ	u	0	u	14	
	AEE84947	ADY86629	ADY19579	·UЛ	•	ADO19579	ABD20872	ABZ97023	ADF76394	ADE39703	ABK84394	AAF21329	AAA35207	AAT59731	ADM33786	ADK90589	ADV43358	ABQ78355	ADT66593	ADB52498	ABA46474	ADT66595	AAZ40299	AAQ27656	AAF87833	AAF87818	ADZ65013	ADC07178	AAC88150	AAD38775	ADZ65011	ADC07176	AAC88149	AAF87819	AAF87821	AAD38777	AAK98258	AAD38774	AAF87820	AAD38773	AAF87822	3	
	7 IMPDH	Ady86629 Human int	9 DNA	67 DNA	8 Huma	Ado19579 Human PRO	Human		4 Novel	Ade39703 Human int	4	_	Human	iuman i	9	Human	Human	Abq78355 Nucleotid	Rat inte	Adb52498 Primary r	4	5 Muri		gp130	Human h	×	Adz65013 Reverse t	Humai	Human	uman	×	76 DNA e	9 Human	9 Human	1 Human	7	8258 Human	4 Human		Aad38773 Human hae	7822 Human h	V43392 Humar	

ALIGNMENTS

RESULT 1 AAK98257 ID AAK9

AAK98257 standard; cDNA; 2859

60

80

238 6 178

358

100

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
ફ
                                                                                                                                                                              US-10-667-289-2 (1-629) x AAK98257
                                                                                                                                                                                                                     The present cDNA sequence encodes the human DNAX cytokine receptor subunit 5 (defined as DCRS5 or II30 receptor) of the invention. DCRS5 is a member of the class I branch of the cytokine receptor superfamily and is closely related to the II-6 receptor subunit gp130 and the II-12R-Beta c-2 subunit. Cytokines are soluble molecules which play a critical role in controlling the complex cellular interactions of the immune response. The invention comprises novel receptors related to cytokine receptors designated DNAX cytokine receptor subunits (DCRS). Specifically the invention comprises a subunit (DCRS5) for a receptor complex for the p40/II-B30 ligand. The DCRS5 proteins of the invention are useful for treating diseases or disorders associated with abnormal expression or abnormal triggering of response to the p40/II-B30 ligand. The proteins of the invention can be used to modulate the physiology or development of a cell from a host which exhibits THI-mediated disease; multiple sclerosis; rheumatoid arthritis; osteoarthritis; inflammatory bowel disease; chronic THZ response; tumour; viral or fungal growth; vaccine recipient; or an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel DNAX cytokine receptor subunit 5 polypeptide which is subunit of receptor complex for p40/IL-B30, useful for treating conditions associated with abnormal expression or triggering of response to p40/IL-
                                                                                                                                                                              Sequence 2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 18; Page 9-12; 74pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-MAY-2000; 2000US-0203426P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200185790-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-NOV-2001
                                                                                                                                    No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (SCHE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2002-062238/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA014008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SCHERING CORP
                                                                                                                                                                                                             response
 MetAsn***ValThrIleGlnTrpAspAlaValIleAlaLeuTyrIleLeuPheSerTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kastelein RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001WO-US015057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "If the base at this position is G (encoding Gly), the base at position 127 is also G (encoding Gln). If the base at this position is A (encoding Arg) the base at position 127 is T (encoding His)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "Mature DCRS5 protein" 563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note= "If the base at this position is G (encoding the base at position 563 is also G (encoding Gly). I base at this position is T (encoding His) the base a position 563 is A (encoding Arg)"

188. .2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note=
119. .1
                                                                    4.9e-304
3324.00
100.0%
100.0%
99.9%
                                                                                                                                                                              929 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Xaa=
                                                                                                                                                                                575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Moore
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Arg
                                                                                                                                                                              Ç
                               (1-2859)
                                                                                                                                                                                560
                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                           Gaps:
                                                                                                                                                                                 G; 791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Parham
                                                                                                                                                                                ij
                                                                                                                                                                                 0
                                                                                                                                                                                U; 4 Other;
                                                           2859
629
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   If the
   20
                                                                   र्
                                                                                                                                  ঠ
                                                                                                                                                                                       5
                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
               δ
                                             밁
                                                                                                     문
                                                                                                                                                                밁
                                              1139
                                                                                                         1079
                                                                                                                                                                  1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          119
                                                                                                                                      321
                                                                                                                                                                                               301
                                                                                                                                                                                                                             959
                                                                                                                                                                                                                                                                                      899
                                                                                                                                                                                                                                                                                                                  261
                                                                                                                                                                                                                                                                                                                                                839
                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                           779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  179
                  361
                                                                                                                                                                                                                                                          281
                                                                                                                                                                                                                                                                                                                                                                                                                                       221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
 IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                   GINVAlThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer 340
                                                                                                                                                                                   LysArgTyrTrpGlnProTrpSer9erProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                               GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly
                                                                                                                                                                                                                                                                                                      ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                            SerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValllePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATGTGAAGAGTTTTAGAGACAGAAGAAGAAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IlePhelysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
                                              ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAAIG
                                                                                                                                                                  AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                              GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                        ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                  TATTGGGATAGTCAAACAACTGAAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                 TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                             TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCACTAGGCATGGAAGAGTCAAAACCAACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCAAGGAAACTTCATTTTATAAAAATGGCATCAAAGAAAAAAATTTCAAATCACAAGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
```

180

598

160

538

120 418

478

300

958 280 868 260 838 240 778 220 718 200 658

1018

380 1198 1138

```
ADS73604
ID ADS7
XX ADS7
XX ADS7
XX ADS7
XX ADS7
XX Huma
XX Huma
XX Bs;
XW Srow
XW anti
XW Small
XW Fv;
XW Anor
XW Ano
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                     ss; gene; human; interleukin 23; subunit p19; IL-23; IL-23p19; tumour; growth; agonist; antagonist; receptor; cancer; antigen-binding site; antibody; extracellular region; antisense nucleic acid; small interference RNA; siRNA; polyclonal; monoclonal; humanized; Fab; Fv; F(ab')2; peptide mimetic; colon; ovarian; breast; melanoma; cachex anorexia; angiogenesis; gastrointestinal tract; respiratory tract;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADS73604 standard; cDNA; 2859
                                                            reproductive
                                                                                                                                                                                                                                                                                                                                                                    16-DEC-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PheAsnArgIleSerLeuLeuGluLys 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ProAspIleGlnAsnSerValGluGluGluThrThrMetLeuLeuGluAsnAspSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AsnAsnGluIleThrSerLeuThrLeuLysProProValAsspSerLeuAspSerGlyAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySerHisLeuSerAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PheIleProGluHisLysProThrAspTyrLysLysGluAsnThrGlyProLeuGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTTGGGATATTTAACAGATCATTC 1258
                                                                                                                                                                                                                                                                                                    coding
                                                            system; endocrine system.
                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                       sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1438
```

δ

S

S

Ş

Ś

Homo sapiens

```
Alignment
                                                                        This sequence encodes human interleukin 23 receptor (IL-23R). The method CC of the invention for modulating tumour growth comprises contacting a CC tumour cell with an agonist or antagonist of IL-23. The agonist or CC antagonist is a binding composition which specifically binds the IL-23 CC pl9 subunit (IL-23pl9) or the IL-23R protein. The identified agonist or CC antagonist may be used for diagnosing or treating a subject suffering CC from a cancer or tumour. The binding composition comprises an antigen-CC binding site of the antibody, an extracellular region of IL-23R, a small conjunction of IL-23R, a small conjunction of IL-23R, a small conjunction comprises a polyclonal cC antibody, a monoclonal antibody, a musticed antibody or its fragment, a CC antibody, a monoclonal antibody, a humanized antibody or its fragment, a CC tumour cell is a colon, ovarian or breast cancer cell, or melanoma cell. CC tumour cell is a colon, ovarian or breast cancer cell, or melanoma cell. CC tumour is of the gastrointestinal tract, respiratory tract, reproductive system or endocrine system. In diagnosing cancer or tumour, the binding composition comprises a nucleic acid probe or primer that specifically binds or hybridises to human or mouse IL-23pl9 cDNA sequences, or the
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Modulating tumor growth, useful for treating a subject suffering ficancer or tumor, comprises contacting a tumor cell with an agonist antagonist of IL-23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CDS
                           Sequence 2859 BP; 929 A; 575
                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 4; SEQ ID NO 5; 57pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-MAR-2003; 2003US-0453672P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-MAR-2004; 2004WO-US007198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2004-668951/65
                                                              IL-23R sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mcclanahan TK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADS73605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SCHERING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag= a
188. .2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /product= "IL-23R"
119. .187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ۵
                               Ç,
                               560
                               <u>ن</u>
                               791
                           Ħ,
                               0
                               U; 4 Other;
```

from

```
당
                     á
                                          밁
                                                            Ś
                                                                                    US-10-667-289-2 (1-629)
                                                                                                                          Percent Similarity:
Best Local Similarity:
                                                                                                                   Query
                                                                                                                                                             No.:
                                                                                                                   Match:
   179
                       21
                                                                -
              CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                             <u>ĀTGĀĀTCAKGTCĀCTĀTTCĀATGGGĀTGCĀGTAATĀGCCCTTTACĀTĀCTCTTCĀGCTGG</u>
                                                        MetAsn***ValThrIleGlnTrpAspAlaValIleAlaLeuTyrIleLeuPheSerTrp
                                                                                                        4.9e-304
3324.00
100.0%
100.0%
99.9%
                                                                                    x ADS73604
                                                                                     (1-2859)
                                                                                                                                                  Length:
Matches:
                                                                                                                             Mismatches:
                                                                                                                                       Conservative:
                                                                                                                   Indels:
                                                                                                        2859
629
0
```

IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln

60

```
1079
                                                                                                                                                                                                                                                                                                                                 1019
                   401
                                                                                                                                                        361
                                                                                                                                                                                                                                                                                               321
                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                     959
                                                                                                                                                                                                                                                                                                                                                                                                                                281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
ProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsn
                                                                      ArgThrGlyIleLysArgArgIleLeuLeuIleProLysTTpLeuTyrGluAspIle
                                                                                                                      GlnvalThrSerLy8AlaPheGlnHisAapThrTrpAsnSerGlyLeuThrValAlaSer
                                                                                                                                                                                                                                                                                                                               GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                         GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ThrasnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValIlePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            H18ValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCAAGGAAACTTCATTTTATAAAAATGGCATCAAAGAAGATTTCAAATCACAAGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                     CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAAC
                                                                                        400
                                                                                                                                                                                                                                                                1138
                                                                                                                                                                                                                                                                                                                                                                                                     1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140
                                                     1318
                                                                                                                          1258
                                                                                                                                                          380
                                                                                                                                                                                          1198
                                                                                                                                                                                                                                                                                                                                 1078
                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            298
                     420
                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          358
 RESULT 3
AEA51089
ID AEA5
XX AEA5
AC A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           음 중
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                      sig_peptide
                                                                                                                                                                                                                                                                                                                                                     11-AUG-2005
                                                                                                                                                                                                                                                                                                                                                                                       AEA51089;
                                                                                                                                                                                                                                                                                                                                                                                                                       AEA51089
                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 581
```

8 8 8 8

Ş

문

문

ð 유

장 음 장 음

ঠ 🖁 ঠ

음 중 음 중

음 성 음

ち 음 성

8 8 8 8

음 성 음

ફ

```
멼
                                                                                                                                                                                                                                Diagnosis; therapeutic; asthma; antiasthmatic; immune disorder; inflammation; respiratory disease; allergy; antiallergic; chronic obstructive pulmonary disease; respiratory-gen; pulmonary fibrosis; antiinflammatory; pneumonia; infection; cytokine receptor family; gene; ds.
                                                                                                                                                                                                                                                                                                                                                    Human DNAX cytokine receptor subunit 5 (DCRS5) DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1319 CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PheasnargileSerLeuLeuGluLys 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProAspIleGlnAsnSerValGluGluGluThrThrMetLeuLeuGluAsnAspSerPro 580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATCCCAGGTTACAAAAGCATCCTAATTTTTGCTTTTTCTGTTTTCAAGTGTGAATTCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSerLou
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSerGlyAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PheIleProGluHisLysProThrAspTyrLysLysGluAsnThrGlyProLeuGluThr 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCAC 1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                            (first
/*tag= a
119.2008
/*tag= b
/product= "Human DNAX cytokine receptor subunit protein"
/tranel_except= (pos:125...127, aa: Xaa)
/note= "Xaa corresponds to Gln or His"
                                                                                                                                                       Location/Qualifiers
                                                                                                                                         .187
                                                                                                                                                                                                                                                                                                                                                                                            entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2005
                                                                v
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               500
```

```
SXCCCCCCCCXXXXIII
                                                                                                                                                                                                                                                          Query
DB:
                                           · 5 B 5
                                                                                                                           Ş
                                                                                                                                                     B
                                                                                                                                                                   Ş
                                                                                                                                                                                             문
                                                                                                                                                                                                             5
                       밁
                                                                                                        В
                                                                                                                                                                                                                                      US-10-667-289-2 (1-629) x AEA51089
                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to a method of treating a human subject experiencing a physiological disorder. The method involves administering an agonist or antagonist of DNAX cytokine receptor subunit 5 (DRS5, also known as IL-23R) or of pl9, where the disorder comprises asthma or allergy, chronic obstructive pulmonary disorder (COPP) or an interstitial lung disorder. The invention is useful for treating interstitial lung disorder e.g. idiopathic pulmonary fibrosis, eosinophilic granuloma and hypersensitivity pneumonitis. The present sequence is the human DCRS5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Use of an agonist or antagonist of DNAX cytokine receptor subunit 5 (DCRS5) or of pl9 for treating a human subject experiencing a physiological disorder such as allergy or chronic obstructive pulmonary disorder (COPD).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 1; 89pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-NOV-2003; 2003US-00720026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-NOV-2004; 2004WO-US038886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mat_peptide
                                                                                                                                                                                                                                                                                                             No.:
                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                    Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SCHE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2005-418000/42.
           101
                               359
                                                                                                               239
                                                                                                                                                        179
                                                                                                                                                                                               119
                                                  81
                                                                                           61
                                                                                                                                  41
                                                                                                                                                                          21
                                                                                                                                                                                                                  ۳
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AEA51090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SCHERING CORP
                                                                                                                                                                                                                                                                                                                                           2859
CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                           AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                      CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                               ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kastelein
                                                                                                                                                                                                                                                                                                                                           B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /transl_except= (pos:563. .565, aa: Xaa)
/note= "Xaa corresponds to Gly or Arg"
188. .2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /*tag= c
/product= "Mature human
(DCRS5) protein"
                                                                                                                                                                                                                                                                                                                                           929
                                                                                                                                                                                                                                                         4.9e-304
3324.00
100.0%
100.0%
99.9%
                                                                                                                                                                                                                                                                                                                                           A.
                                                                                                                                                                                                                                                                                                                                           575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Moore
                                                                                                                                                                                                                                                                                                                                           ü
                                                                                                                                                                                                                                       (1-2859)
                                                                                                                                                                                                                                                                                                                                           560
                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₹,
                                                                                                                                                                                                                                                                                                                                           G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Parham
                                                                                                                                                                                                                                                                                                                                            791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNAX cytokine receptor subunit
                                                                                                                                                                                                                                                                                                                                           Ţ,
                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                           ٦,
                                                                                                                                                                                                                                                          2859
0
0
0
                                                                                                                                                                                                                                                                                                                                            4
                                                                                                                                                                                                                                                                                                                                            Other;
                                                                                                                                                                            40
            120
                                418
                                                    100
                                                                        358
                                                                                           80
                                                                                                               298
                                                                                                                                   60
                                                                                                                                                        238
                                                                                                                                                                                                178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             տ
                                    밁
                                                                                                                                                                                 5
                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                              멍
                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                뫄
                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ં.ઇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    멂
   문
                ð
                                                         5
                                                                                 문
                                                                                               Ś
                                                                                                                       밁
                                                                                                                                         S
                                                                                                                                                                 문
                                                                                                                                                                                                        밁
                                          1439
                                                                                                                                                                  1259
                                                                                                                                                                                                          1199
                                                                                                                                                                                                                                                 1139
                                                                                                                                                                                                                                                                                          1079
                                                                                                                                                                                                                                                                                                                                  1019
    1499
                                                                                  1379
                                                                                                                           1319
                                                                                                                                                                                                                                                                     341
                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             479
                      461
                                                              441
                                                                                                     421
                                                                                                                                             401
                                                                                                                                                                                      381
                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                               321
                                                                                                                                                                                                                                                                                                                                                                          959
                                                                                                                                                                                                                                                                                                                                                                                                                  899
                                                                                                                                                                                                                                                                                                                                                                                                                                                            839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     419
                                                                                                                                                                                                                                                                                                                                                                                              281
                                                                                                                                                                                                                                                                                                                                                                                                                                      261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HisValLysSerLeuGluThrGluGluGluGlnThrTeuThrSerSerTyrIleAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerGlyTyrProProAspIleProAspGluValThrCysVallIeTyrGluTyrSerGly
                                         ArgThrGlyIleLy8ArgArgIleLeuLeuLleProLy8TrpLeuTyrGluAspIle
                                                                                                                                                                                                                   IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                                                                                                                                                             IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet
                                                                                                                                                                                                                                                                                                     GlnValThrSerLyBAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer
                                                                                                                                                                                                                                                                                                                                              LysArgTyrTrpG1nProTrpSerSerProPhePheHisLysThrProG1uThrValPro
                                                                                                                                                                                                                                                                                                                                                                                       GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal 160
             ArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAspLeu
                                                                                                AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle
                                                                                                                                                                                                                                                                                                                                   AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                                            GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                           TATTGGGATAGTCAAACAACTAGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
   AGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTC
                                                                                  ANTAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                   ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                           CAGGTCACATCAAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
    1558
                                            1498
                                                                                                                                                                   1318
                                                                                                                                                                                                                                                                                                                                    1078
                                                                                                                                                                                                                                                                                                                                                                             1018
                        480
                                                                460
                                                                                    1438
                                                                                                      440
                                                                                                                           1378
                                                                                                                                               420
                                                                                                                                                                                        400
                                                                                                                                                                                                            1258
                                                                                                                                                                                                                                                    1198
                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                            1138
                                                                                                                                                                                                                                                                                                                340
                                                                                                                                                                                                                                                                                                                                                       320
                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                    958
                                                                                                                                                                                                                                                                                                                                                                                                                                          280
                                                                                                                                                                                                                                                                                                                                                                                                                                                              898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  140
```

```
RESULT 4
ADV43392
ID ADV4
XX ADV4
XX ADV4
XX ADV4
XX ADV4
XX Micr
XX Micr
XX Micr
XX Micr
XX Monon
XX 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  성 음 성 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5 8 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             음 성 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       음 중 음
The invention relates to a new microarray which comprises probes genes involved in psychoneuroendocrinimmune (PNI) activity. The microarray is useful in diagnosing a condition associated with PN
                                                             Claim
                                                                                                   New microarray comprising probes for genes involved in psychoneuroendocrinimmune (PNI) activity, useful in diagnosing condition associated with PNI activity, e.g., inflammatory or
                                                                                                                                                                                                                                                            04-JUN-2003; 2003US-0475915P
                                                                                                                                                                                                                                                                                                                                                                                                                cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                microarray;
non-insulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADV43392;
                                                                                                                                                                                                                                                                                        04-JUN-2004; 2004WO-US017686
                                                                                                                                                                                                                                                                                                                      16-DEC-2004
                                                                                                                                                                                                                                                                                                                                                      WO2004108899-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-MAR-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADV43392 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1559
                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                           1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         psychoneuroendocrinimmune expressed sequence tag
                                                                                                                                                                                                                                                                                                                                                                                                               neoplasm;
                                                           SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PheAsnArgIleSerLeuLeuGluLys 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTCTGTTTTCAAGTGTGAATTCACTA
                                                                                                                                                                                              Ņ
                                                                                                                                                                                                                                                                                                                                                                                                             psychoneuroendocrinimmune; chronic fatigue;
dependent diabetes; allergy; immune disorder;
plasm; infection; expressed sequence tag; ss.
                                                           ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first
                                                                                                                                                                                              Vernon
                                                          NO 1020;
                                                                                                                                                                                                                              HEALTH &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        entry)
                                                                                                                                                                                                  SD
                                                                                                                                                                                                                              HUMAN
                                                          254pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP
                                                                                                                                                                                                                               SERVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                              inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                        infectious
                                                                                                                    þ
   PNI
                             for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           520
 음 성
                                                        밁
                                                                              S
                                                                                                                    당
                                                                                                                                       ð
                                                                                                                                                                    よ
                                                                                                                                                                                                     S
                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ર્ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Хо
::
                                                                                      241
                                                                                                                    661
                                                                                                                                                                                601
                                                                                                                                                                                                             201
                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                    161
                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
 781
                          261
                                                          721
                                                                                                                                                  221
                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21
ThrasnGlnThrTrpasnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       និន្និន្ននិន្និន្ន
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-667-289-2 (1-629)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  activity, such as CFS, type-2 diabetes, allergic condition, inflacancer and infection. The present sequence represents a psychoneuroendocrinimmune gene expressed sequence tag. Note the specificatio mentions SEQ ID NO of up to 3314 but only sequences SEQ ID NO 1829 are provided.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValllePro
                                                                                                                                                                                   CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                   TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                                                            SerAlaAlaVallleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle
                                                                                                                                                                                                                                                  CATGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                  HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                                                                                                                                                                                                                                                  AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal
                                                                                                                                                                                                                                                                                                                                                                        TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                               SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATAAAACAACAGCTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
TATTGGGATAGTCAAACAACTTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                           TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                              AACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2.41e-303
3314.00
99.5%
99.5%
99.6%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                x ADV43392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (1-1890)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <u>ი</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1890
626
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        U; 0 Other,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   inflammation,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ą
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ទ
                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                             160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                         140
                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80
 780
                              260
                                                             720
                                                                                          240
                                                                                                                         660
                                                                                                                                                      220
                                                                                                                                                                                     600
                                                                                                                                                                                                                   200
                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6
```

```
1741
                                                                                                                                                                                                                                                                                                            1501
                                                                                                                                                                                                                                                                                                                                                                 1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1021
                                                                                                                                             1681
                                                                                                                                                                                                  1621
                                                                                                                                                                                                                                                        1561
                                                                                                                                                                                                                                                                                                                                                                                                                      1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1201
                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                 521
                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                               461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              341
                                                                                                                                                                      561
                                                                                                                                                                                                                                                                                                                                       501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                              109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PheAsnArgIleSerLeuLeuGluLys 629
                                                    ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                                          AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC
                                                                                                         SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                                                                                                                                                                      ASDASDG1u1leThrSerLeuThrLeuLysProProValAspSerLeuAspSerG1yAsD
                                                                                                                                                                                                                                                                                                                                                                              AsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySerHisLeuSerAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                  ArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PheIleProGluHisLysProThrAspTyrLysLysGluAsnThrGlyProLeuGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ArgThrGlyIleLy8ArgArgIleLeuLeuLeuIleProLy8TrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCGTCTTTGCTGTTATGTTGTCAATTCTTTTGATTGGGATATTTAACAGATCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuGlyMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                          1800
                                                                                                                                              1740
                                                                                                                                                                                                  1680
                                                                                                                                                                                                                                                        1620
                                                                                                                                                                                                                                                                                                             1560
                                                                                                                                                                                                                                                                                                                                                                                                                       1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1020
                                       1860
                                                               620
                                                                                                                  600
                                                                                                                                                                       580
                                                                                                                                                                                                                             560
                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                       520
                                                                                                                                                                                                                                                                                                                                                                 1500
                                                                                                                                                                                                                                                                                                                                                                                            500
                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    900
```

중 음 중

S B S B

1861

밁

121

ATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA

유성

음 성 음 성

음 성

В

중 유

8 8 8 8 8

유 성

B

Ś

밁

ર્

밁

8 8 8 8

```
Alignment
Pred. No.:
Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ARBSULT 5
ARBSULT 5
ARAFB782
IID AAFB8
XX AAFB8
XX AAFB8
XX AAFB8
XX Huma
XX Huma
XX Huma
XX Home
CDS
FTI CDS

ঠ
                                                           밁
                                                                                                  ঠ
                                                                                                                                                      문
                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                               US-10-667-289-2 (1-629) x AAF87822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present sequence encodes a human haemopoietin receptor protein NR12 designated NR12.5. NR12 has immunosuppressive and antiallergic activities. NR12 can be used for searching for haemopoietin factors with the potential for controlling autoimmune disease, tissue rejection and allergies against e.g. metals and pollen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New hemopoietin receptor protein NR12 useful for screening for new binding factors for potential treatment of autoimmune disease, tissue rejection and allergies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; haemopoietin receptor protein; NR12; immunosuppressive; antiallergic; haemopoietin factor; autoimmune disease; tissue metal allergy; pollen allergy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1910 BP; 654 A; 379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-SEP-1999; 99JP-00273358 03-AUG-2000; 2000JP-00240397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human haemopoietin receptor protein NR12.5 encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAF87822;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAF87822 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Fig 13; 140pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Maeda M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-SEP-2000; 2000WO-JP006654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200123556-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                      No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (CHUG-) CHUGAI RES INST MOLECULAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001-266154/27.
DB; AAB74967.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens.
            41
                                                           61
                                                                                                     21
                                                                                                                                                                                                     H
                                                                                                                                                      CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Yaguchi N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag= a
/product= "NR12.5"
/note= "haemopoietin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                2.45e-303
3314.00
99.5%
99.5%
99.6%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .1890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDNA; 1910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ç
                                                                                                                                                                                                                                                   (1-1910)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         352 G;
                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDICINE INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               receptor protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           525 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                           1910
626
0
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rejection,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NO: 9.
                                                             120
                 60
                                                                                                            40
                                                                                                                                                           60
```

```
1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                   261
                                                                                                                                                                                                                         961
                                                                                                                                                                                                                                                   321
                                                                                                                                                                                                                                                                                901
                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                   841
                                                                                                                                                                                                                                                                                                                                                               281
                                                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
ArgThrGlyIleLy8ArgArgIleLeuLeuLeuIleProLy8TTpLeuTyrGluAspIle
                                                                                                           IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet
                                                                                                                                                                                                                                       GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer
                                                                                                                                                                                                                                                                             GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                                                                     GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly
                                                                                                                                                                                                                                                                                                                                                                                                           ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerAlaAlaVallleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValllePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAAGGAAACTTCATTTTATAAAAATGGCATCAAAGAAGATTTCAAATCACAAGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                                                                                                                         CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                          ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                     1080
  1260
                            420
                                                      1200
                                                                                  400
                                                                                                                                                                                                                            1020
                                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                960
                                                                                                                                                                                                                                                                                                         320
                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                    280
                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
```

```
밁
                                   ঠ
                                                    유
                                                                          유정
                                                                                                        당
                                                                                                                  Ş
                                                                                                                                    밁
                                                                                                                                             S
                                                                                                                                                              밁
                                                                                                                                                                        Ş
                                                                                                                                                                                    В
                                                                                                                                                                                                   S
                                                                                                                                                                                                                   뮍
                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                              S
AAD38773
                                                    1801
                                                                               1741
                                                                                                          1681
                                                                                                                                    1621
                                                                                                                                                                                                                    1441
                                                                                                                                                                                                                                              1381
                                                                                                                                                                                                                                                                         1321
                                                                                                                                                                                                                                                                                                    1261
                                                                                                                                                              1561
                                                                                                                                                                                         1501
                                                                                           581
                                                                                                                      561
                                                                                                                                                 541
                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                           461
                                                                                                                                                                                                                                                                                      441
                                       621
                                                                 601
                                                                                                                                                                           521
                                                                                                                                                                                                      501
                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                         ASDASDSEYSEYGIUGINVALLEUTYYVALASPPYOMETILETHYGIUILELYSGIUILE
                                                    GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTTGGAAAGCCAC 1860
                                                            ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                              AsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSerLeu
                                                                                                                                                                                                                                                      ArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAspLeu
                                                                                                                                                                                                                                                                          TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGAAGAATACAGGACCCCTGGAGACA 1380
                                                                                                                                                                                                                                                                                  PheIleProGluHisLysProThrAspTyrLysLysGluAsnThrGlyProLeuGluThr
standard;
                                  PheAsnArgIleSerLeuLeuGluLys
                                                                                                                                                                                                                                               AGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTC
CDNA;
                                       629
                           1887
                                                                                                                                                                 1620
                                                                                                           1740
                                                                                                                                      1680
                                                                                                                                                                                                                                               1440
                                                                   620
                                                                                                                        580
                                                                                                                                                  560
                                                                                                                                                                                                                     1500
                                                                                                                                                                             540
                                                                                                                                                                                                                                  500
                                                                                                                                                                                                                                                                                        460
```

23-SEP-2002 (first entry)

haematopoietin receptor 2 (HPR2) cDNA.

RESULT 6
AAD3873
ID AAD38
XX AAD387
AC AAD3
XX AAD38
AC AAD3
XX AAD3
AC AAD3
XX Huma
AC Huma
A Human; haematopoietin receptor; receptor; HPR1; HPR2; cell proliferation; pancytopaenia; leukopaenia; anaemia; thrombocytopaenia; osteoporosis; neurodegenerative disorder; leukaemia; carcinoma; haematologic disorder; cancer; myelodysplastic syndrome; idiopathic thrombocytopaenic purpure; ITP; sickle cell vasocclusive crisis; myelofibrosis; myeloid metaplasia; osteoclast disorder; periodontitis; acute polyneuropathy; Bell's palsy; anorexia nervosa; chronic fatigue syndrome; Creutzfeld-Jacob disease; demyelinating neuropathy; Guillain-Barre syndrome; Gulf war syndrome; vertebral disc disease; myasthenia gravis; chronic neuronal degeneration; stroke; fatigue; tumour; sarcoma; osteoporosis; obesity; infertility; ischaemic disease; gene; ss.

Homo sapiens

Location/Qualifiers 107. .1996

ર્ 밁 중 유

Ş 당

8 8 8 8

8

음 중

8 8 8 8

8 8 8 8 8 8 8

8 음 성 밁

/*tag= a
/product= "Human HPR2 protein"
/note= "This region is specifically claimed AS SEQ 占 ö

```
CC metastasis, osteoporosis resulting from an excess of bone-resorbing CC cells. HPR sequences are also useful for treating medical conditions and CC diseases such as cell proliferation, metabolic and reproductive hormone CC related conditions. They are useful for treating various haematologic and concologic disorders e.g., Epstein-Barr virus-positive nasopharyngeal CC carcinoma, myelogenous leukaemia, colon, stomach, prostate, renal cell, CC cervical and ovarian cancers, lung cancer (SCLC and NSCLC), including CC carcinoma, carcinoma (e.g., adenocarcinoma (for example, breast cancer), CC squamous cell carcinoma), haematologic disorders, anaemias (e.g., anaemia) myeloc disorders, anaemia sideroblasts or with excess blasts, including transcerory anaemia, refractory anaemia CC displastic syndromes (including refractory anaemia, refractory anaemia CC paenic purpura (ITP), sickle cell vasocclusive crisis, myelofibrosis/CC paenic purpura (ITP), sickle cell vasocclusive crisis, myelofibrosis/CC myeloid metaplasia, osteoclast disorders that lead to bone loss such as costeoporosis including post-menopusal osteoporosis, periodontitis CC resulting in tooth loosening or loss, prosthesis loosening after joint CC myasthenia share syndrome, vertebral disc disease, demyelinating neuropathy, CC dillain-Barre syndrome, vertebral disc disease, Gulf war syndrome, CC myasthenia gravis, chronic neuronal degeneration, stroke including cerebral ischaemic diseases. HPRI and HPRZ polypeptides are also useful for treating various other disorders such as osteoporosis, obesity, cd efficient mammary development and infertility. The present sequence is
                                                            Alignment Scores:
    Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention relates to human and murine haematopoietin receptor polypeptides HPR1 and HPR2. Sequences of the invention are useful for treating cell proliferation conditions e.g., pancytopaenia, leukopaenia, anaemia, thrombocytopaenia, neurodegenerative disorders and osteoporosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human and murine hematopoietin receptor polypeptides HPR1 and HPR2, useful for treating cell proliferation, metabolic, and reproductive hormone related conditions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-OCT-2000; 2000US-0238706P.
13-OCT-2000; 2000US-0240476P.
20-FEB-2001; 2001US-0270282P.
                                         No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      resulting from a lack of bone-forming cells. They are also useful for treating cell proliferation conditions such as leukaemia and tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 9; Page 117-119; 136pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-OCT-2001; 2001WO-US031634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (IMMV) IMMUNEX CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200229060-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2002-330172/36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ŋ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mosley BA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /product= "Human m
replace(1035, C)
/*tag= d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        replace(2172, G)
/*tag= e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 in claim 9
137. .175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           176. .1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /*tag=
                                                                                                    922 A;
  4.27e-303
3314.00
99.5%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bird TA,
                                                                                                      574
                                                                                                    Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          얁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  English.
                                                                                                      551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mature HPR2 protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the specification"
Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dubose
                                                                                                    Ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RF,
                                                                                                  H
':
                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wiley
                                                                                                    U; 0 Other;
  2830
626
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and reproductive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for
                               δ
                                                                               밁
                                                                                                                     Ś
                                                                                                                                                                 문
                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-667-289-2 (1-629) x AAD38773 (1-2830)
                                         321
                                                                                                                         301
                                                                                                                                                                 947
                                                                                                                                                                                                    281
                                                                                                                                                                                                                                            887
                                                                                                                                                                                                                                                                                                                         827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   587
                                                                                                                                                                                                                                                                                  261
                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                       767
                                                                                                                                                                                                                                                                                                                                                                                                                                                 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           107 ATGAATCAGGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41 IlePheLysMetGlyMetAsmIleSerIleTyrCysGlnAlaAlaIleLysAsmCysGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MetAsn***ValThrIleGlnTrpAspAlaValIleAlaLeuTyrIleLeuPheSerTrp
                                                                                                                                                                                   GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                               SerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValllePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                             GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer
                                                                                                                                                                 GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                   ThräsnGlnThrTrpäsnVallysGluPheäspThräsnPheThrTyrValGlnGlnSer
                                                                                                                                                                                                                                                                                                                           TATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                            TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATAGTGATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AsnlysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                       TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99.5%
99.6%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  000
      1126
                                                                                                                                                                 1006
                                         340
                                                                                                                                                                                                                                                                                                                           886
                                                                                                                                                                                                                                                                                                                                                                 260
                                                                                                                                                                                                                                                                                                                                                                                                           826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             166
```

```
RESULT 7
AAF87820
ID AAF8
XX
AC AAF8
XX
DT 11-J
XX
DE Huma
XX
KW Huma
KW Huma
Human; haemopoietin receptor protein; NR12; immunosuppressive; antiallergic; haemopoietin factor; autoimmune disease; tissue rejection;
                                     Human haemopoietin receptor protein NR12.3 encoding cDNA SEQ
                                                                                                                  AAF87820
                                                                                                                                                                                                                                                                                                                             1787
                                                                                                                                                                                                                                                                                                                                                                                 1727
                                                                                                                                                                                                                                                                                                                                                                                                                                   1667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1127
                                                                                                                                                                                                                                                                           1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1247
                                                                                                                                                                                                                                                  109
                                                                                                                                                                                                                                                                                                                                                                                                                                                            521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   341
                                                                                                                                                                                                                                                                                                                                                      561
                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                    standard;
                                                                                                                                                                    PheAsnArgIleSerLeuLeuGluLys 629
                                                                                                                                                                                                                                     ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                                                                                                                                                                                                                                       SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                                                                                                                                                                                                                                            CCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCC
                                                                                                                                                                                                                                                                                                                                           ProAspIleGlnAsnSerValGluGluThrThrMetLeuLeuGluAsnAspSerPro
                                                                                                                                                                                                                                                                                                                                                                                              SerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                   AsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSerGlyAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACACTGGATATAAACCCCAAATTTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySerHisLeuSerAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PheIleProGluHisLysProThrAspTyrLysLysGluAsnThrGlyProLeuGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ProAsnMetLysAsnSerAsnVallysMetLeuGlnGluAsnSerGluLeuMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                 AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                    AATCCCAGGITACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGTGTGAATTCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGGAGACACACCCCTGGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                                    2123
                                                                                                                    ВP
                                        급
                                        NO:5.
                                                                                                                                                                                                                                                                                                                             1846
                                                                                                                                                                                                                                                                                                                                                                                 1786
                                                                                                                                                                                                                                                                                                                                                                                                         560
                                                                                                                                                                                                                                                                                                                                                                                                                                    1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1366
                                                                                                                                                                                                                        1966
                                                                                                                                                                                                                                                  620
                                                                                                                                                                                                                                                                           1906
                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                ঠ
                                           밁
                                                                       Ś
                                                                                                     밁
                                                                                                                       ঠ
                                                                                                                                                  밁
                                                                                                                                                                             Ś
                                                                                                                                                                                                          밁
                                                                                                                                                                                                                            S
  멼
                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-667-289-2 (1-629) x AAF87820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence encodes a human haemopoietin receptor protein NR12 designated NR12.3. NR12 has immunosuppressive and antiallergic activities. NR12 can be used for searching for haemopoietin factors with the potential for controlling autoimmune disease, tissue rejection and allergies against e.g. metals and pollen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New hemopoietin receptor protein NR12 useful for screening for new binding factors for potential treatment of autoimmune disease, tiss rejection and allergies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; Fig 6; 140pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Maeda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27-SEP-1999; 99JP-00273358
03-AUG-2000; 2000JP-00240397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-SEP-2000; 2000WO-JP006654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              metal allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200123556-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2001-266154/27.
DB; AAB74965.
                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
  398
                                                   338
                                                                                                      278
                                                                                                                                                        218
                                                                                                                                                                                                            158
                                                                           81
                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3
                                                                                                                                                                                 4
                                                                                                                                                                                                                                   2
                                                                                                                                                                                                                                                              98
                                                                                                                                                                                                                                                            AsnlysThrThrAlaArgLeuTrpTyrLysAsnPhoLeuGluProHisAlaSorMetTyr
                                                                                                                       ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                                                        TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                           CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                               2123 BP; 731 A; 419 C;
                                                                                                      Yaguchi N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
98. 1987
/*tag= a
/product= "NR12.3"
/note= "haemopoietin r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              pollen allergy;
                                                                                                                                                                                                                                                                                                                                         3.44e-301
3292.00
99.2*
98.9*
99.0*
                                                                                                                                                                                                                                                                                                                 (1-2123)
                                                                                                                                                                                                                                                                                                                                                                                                                                                395 G; 578 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           receptor protein"
```

8 8 8 8 8 8

8 8 8 8

8 8 8 8 8 8 8 8 8 8

중 음 중 음

8 밁 र्श 당

밁

```
1178
                                                                                                                                                                                           1238
                                                                                                                                                                                                                                                                                          1118
                                                                                                                                                                                                                                                                                                                                         1058
                                                                                                                                            1298
                                                                                                                    421
                                                                                                                                                                   401
                                                                                                                                                                                                                                                                                                                                                                 321
                                                                                                                                                                                                                                                                                                                                                                                                                                        938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         818
                                                                                                                                                                                                                                                                                                                                                                                         866
                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                        GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAspLeu
                                                          PheIleProGluHisLysProThrAspTyrLysLysGluAsnThrGlyProLeuGluThr
                                                                                             AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCCATGATTACAGAGATAAAAGAAATC
                                                                                                          AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle
                                                                                                                                            CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                         ProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsn
                                                                                                                                                                                            CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                                                                                                                         ArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                           IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                                         LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                           GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerAlaAlaVallleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValIlePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGACATTTAACAGATCATTC
1537
                                                                                             1417
                                                                                                                                                                                           1297
                                                                                                                                                                                                                                           1237
                                                                                                                                                                                                                                                                                          1177
                                                                                                                                                                                                                                                                                                                                           1117
                                                                                                                                                                                                                                                                                                                                                                                           1057
                      480
                                                                     460
                                                                                                                    440
                                                                                                                                                                                                                   400
                                                                                                                                                                                                                                                                   380
                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                  320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      577
```

δ

밁

음 성 음

5 B 5

음 성 음

S ф 5 문 8 음 성

```
RRSULT 8
AAD38771
ID AAD37
XX AAD3877
AC AAD3
XX AAD3877
AC AAD3
XX Huma
DE Huma
XX Hu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; haematopoietin receptor; receptor; HPR1; HPR2; cell proliferation; pancytopaenia; leukopaenia; anaemia; thrombocytopaenia; osteoporosis; neurodegenerative disorder; leukaemia; carcinoma; haematologic disorder; cancer; myelodysplastic syndrome; idiopathic thrombocytopaenic purpura; TTP; sickle cell vasocclusive crisis; myelofibrosis; myeloid metaplasia; osteoclast disorder; periodontitis; acute polyneuropathy; Bell's palsy; anorexia nervosa; chronic fatigue syndrome; Creutzfeld-Jacob disease; demyelinating neuropathy; Guillain-Barre syndrome; Oulf war syndrome; vertebral disc disease; myasthenia gravis; chronic neuronal degeneration; stroke; fatigue; tumour; sarcoma; osteoporosis; obesity; infertility; ischaemic disease; gene; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human haematopoietin receptor 2 (HPR2) ex8-ex9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAD38774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAD38774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PheAsnArgIleSerLeuLeuGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSerGlyAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATAATGAAATTACTTCCTTAAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1657
```

Homo 06-OCT-2000; 2000US-0238706P. 13-OCT-2000; 2000US-0240476P. 20-FEB-2001; 2001US-0270282P. 05-OCT-2001; 2001WO-US031634. WO200229060-A2 sapiens 1. .1698 /*tag= a /product= "Human HPR2 Location/Qualifiers ex8-ex9 protein"

원 유

S 밁

(IMMV) IMMUNEX CORP

5 밁

중 유

S

음 성 음

5 B 3

```
Best I
Query
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similari
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CC resulting from a lack of bone-forming cells. They are also useful for cells treating cell proliferation conditions such as leukaemia and tumour cells. They are also useful for cells. HPR sequences are also useful from an excess of bone-resorbing cells. HPR sequences are also useful for treating medical conditions and cell proliferation, metabolic and reproductive hormone cells conditions. They are useful for treating various haematologic and concologic disorders e.g., Epstein-Barr virus-positive nasopharyngeal corritoma, myelogenous leukaemia, colon, stomach, prostate, renal cell, cervical and ovarian cancers, lung cancer (SCLC and NSCLC), including carcinoma, carcinoma (e.g., adenocarcinoma (for treating various haematologic and corritoma), carcinoma (e.g., adenocarcinoma (for example, breast cancer), ce quamous cell carcinoma), haematologic disorders, anaemias (e.g., anaemia cell replacement, cell carcinoma), haematologic disorders, anaemias (e.g., anaemia cell virus pastic syndromes (including refractory anaemia, refractory anaemia cell virus pastic syndromes (including refractory anaemia, refractory anaemia cell virus pastic purpura (ITP), sickle cell vasocclusive crisis; myelofibrosis/ corplacement, neurodegenerative conditions (e.g., acute polyneuropathy, cell captured disorders that lead to bone loss such as osteoporosis nucluding creatized-Jacob disease, demyelinating neuropathy, cell captured conditions (e.g., acute polyneuropathy, cell captured captured captured polyneuropathy, cell captured captured captured polyneuropathy, cell captured 
                                                                                                                                                                                                                                                                                                                                                                                    US-10-667-289-2 (1-629) x AAD38774 (1-1698)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to human and murine haematopoietin receptor polypeptides HPR1 and HPR2. Sequences of the invention are useful for treating cell proliferation conditions e.g., pancytopaenia, leukopaenia, anaemia, thrombocytopaenia, neurodegenerative disorders and osteoporosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human and murine hematopoietin receptor polypeptides HPR1 and HPR2, useful for treating cell proliferation, metabolic, and reproductive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2002-330172/36.
                                            181
                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9; Page 123-124; 136pp; English
  81
                                                                                     13
                                                                                                                                                                     41
                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                        21
                                                                      ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                               ATTTTTAAGATGGGTATGAATATCTCTATATATTTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                     IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
                                                                                                                                                                                                                 TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                                                                                                                                  AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ex8-ex9 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mosley BA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 597 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                               3.89e-269
2952.00
89.3%
89.3%
89.3%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bird TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   310
                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dubose RF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 G; 456 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wiley
                                                                                                                                                                                                                                                                                                                                                                                                                              1698
562
0
3
64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SR;
                                                                                     80
                                                                                                                               180
                                                                                                                                                                     60
                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                                    60
                                              240
                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                      S
                                                               문
                                                                                                S
                                                                                                                                               밁
                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                     뭐
                                                                                                                                                                                                                                                                                                                        뭐
                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                   1009
                                                                                                         421
                                                                                                                                                                                           401
                                                                                                                                                                                                                                       952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                        441
                                                                                                                                                                                                                                                                              381
                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                            951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ANTAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                               ArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIle 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrasnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValIlePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer 120
PheIleProGluHisLysProThrAspTyrLysLysGluAsnThrGlyProLeuGluThr
                                                                                            AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle 440
                                                                                                                                                 ProasnmetLysasnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsn 420
                                                                                                                                                                                                                                     ---ACAGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT 1008
                                                                                                                                                                                                                                                                                                                                                                    IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                    IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerAlaAlaVallleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATGTGAAGAGTTTAGAGACAGAAGAAGAAGAAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerGlyTyrProProAspIleProAspGluValThrCysVall1eTyrGluTyrSerGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGCACTGCTGAATGTCCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                  AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC 1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TATTGGGATAGTCAAACAACTTGAAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                              1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140
                                                                                                                                                                                                                                                                                                                             951
                                                                                                                                                                                                                                                                                                                                                                                                              951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
```

문 S 문 8 밁 ঠ 밁 ঠ

```
RRESULT 9
AAKS98258
ID AAKS98258
XX AAKS98258
XX AAKS9825
XX Huma
XX Huma
XX Huma
XX Huma
XX Himmu
XW celli
XW celli
XW elli
XW 17H2
XX Huma
XX IS-N
XX Homc
X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; DNAX cytokine receptor subunit 5; DCRS5; IL30 receptor; immune response; DCRS; p40/IL-B30 ligand; cell physiology modulation; cell development modulation; TH1-mediated disease; multiple sclerosis; rheumatoid arthritis; osteoarthritis; inflammatory bowel disease; diabetes; psoriasis; sepsis; allogenic transplant; recipient; TH2 response; tumour; viral growth; fungal growth; vaccine;
Novel DNAX cytokine receptor subunit 5 polypeptide which is subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human DNAX cytokine receptor subunit 5 (DCRS5) reverse translation DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAK98258;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAK98258 standard; DNA; 1887
                                                                      WPI; 2002-062238/08
                                                                                                                               Chirica M,
                                                                                                                                                                                                                                                               10-MAY-2000; 2000US-0203426P
                                                                                                                                                                                                                                                                                                                        10-MAY-2001; 2001WO-US015057
                                                                                                                                                                                                                                                                                                                                                                                           15-NOV-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200185790-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    allergic response; ss; reverse translation
                                                                                                                                                                                               (SCHE ) SCHERING CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PheAsnArgIleSerLeuLeuGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerGluThrileProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProAspIleGlnAsnSerValGluGluGluThrThrMetLeuLeuGluAsnAspSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSerGlyAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACACTGGATATAAACCCCAAATTTCAAATTTTCTGCCTGAGGAAGCCATCTCAGCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySerHisLeuSerAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACA 1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTCAATAGGATTTCACTCTTGGAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGTGTGAATTCACTA
                                                                                                                               Kastelein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                               ₽Ą,
                                                                                                                               Moore
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В₽
                                                                                                                               ₹
₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               629
                                                                                                                                   Parham
                                                                                                                                      Ē
          of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          520
```

5 밁 8 밁 8 밁 Ş 멍 Ś 뮍 S 당 ঠ 뭐 5 밁 Ś

밁

```
receptor complex for p40/IL-B30, useful for treating conditions associated with abnormal expression or triggering of response to p40/IL-B30 ligand.
```

Disclosure; Page 13; 74pp; English.

The present DNA sequence represents a reverse translation of the human CC DNAX cytokine receptor subunit 5 (defined as DCRS5 or II30 receptor) of CC the invention. DCRS5 is a member of the class I branch of the cytokine creeptor superfamily and is closely related to the II-6 receptor subunit CC gpl30 and the II-12R-Beta-2 subunit. Cytokines are soluble molecules CC which play a critical role in controlling the comprises novel interactions of the immune response. The invention comprises novel CC receptors related to cytokine receptors designated DNAX cytokine receptor subunits (DCRS). Specifically the invention comprises a subunit DCRS5) CC for a receptor complex for the p40/II-B30 ligand. The DCRS5 proteins of CC with abnormal expression or abnormal triggering of response to the p40/II-B30 ligand. The proteins of the invention can be used to modulate the CC physiology or development of a cell from a host which exhibits TH1-CC mediated disease; multiple sclerosis; rheumatoid arthritis; osteoarthritis; inflammatory bowel disease; diabetes; psoriasis; sepsis; an allogenic transplant recipient; chronic TH2 response; tumour; viral or CC fungal growth; vaccine recipient; or an allergic response

Sequence 1887 BP; 421 A; 183 ü 245 G; 257 T; 0 U; 781 Other;

Alignment Scores:

뭥	8	뭥	Ş	밁	ફ	뮹	Ś	DЬ	Ş	망	Ş	뭣	Ş	멍	Ş	DЬ	Ş
481	161	421	141	361	121	301	101	. 241	81	181	61	121	41	61	21	ı	–
CAYGTNAARWSNYTNGARACNGARGARGARCARCARTAYYTNACNWSNWSNTAYATHAAY 540	HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn	AAYATGACNTGYACNTGGAAYGCNMGNAARYTNACNTAYATHGAYACNAARTAYGTNGTN	AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal	WSNGGNTAYCCNCCNGAYATHCCNGAYGARGTNACNTGYGTNATHTAYGARTAYWSNGGN	SerGlyTyrProProAsplleProAspGluValThrCysValIleTyrGluTyrSerGly	TGYACNGCNGARTGYCCNAARCAYTTYCARGARACNYTNATHTGYGGNAARGAYATHWSN	CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer	AAYAARACNACNGCNMGNYTNTGGTAYAARAAYTTYYTNGARCCNCAYGCNWSNATGTAY	AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr	CCNMGNAARYTNCAYTTYTAYAARAAYGGNATHAARGARMGNTTYCARATHACNMGNATH	ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle 80	ATHTTYAARATGGGNATGAAYATHWSNATHTAYTGYCARGCNGCNATHAARAAYTGYCAR	. IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln 60	TGYCAYGGNGGNATHACNAAYATHAAYTGYWSNGGNCAYATHTGGGTNGARCCNGCNACN	CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr 40	ATGAAYCAYGTNACNATHCARTGGGAYGCNGTNATHGCNYTNTAYATHYTNTTYWSNTGG 60	MetAsn***ValThrileGinTrpAspAlaValIleAlaLeuTyrIleLeuPheSerTrp 20
0	180	480	160	420	140	360	120	300	100	240	0	180	0	120	٥	0	0

```
1021
                                                                                                                                                                                                         1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1081
                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661 WSNGCNGCNGTNATHWSNMGNGCNGARACNATHAAYGCNACNGTNCCNAARACNATHATH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                201
                                                                 AsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSerLeu
                                                                                                                     AAYACNGGNTAYAARCCNCARATHWSNAAYTTYYTNCCNGARGGNWSNCAYYTNWSNAAY
                                                                                                                                                                                                                                 AsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySerHisLeuSerAsn
                                                                                                                                                                                                                                                                                     ArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                      PheIleProGluHisLysProThrAspTyrLysGluAsnThrGlyProLeuGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATHGTNTTYGCNGTNATGYTNWSNATHYTNWSNYTNATHGGNATHTTYAAYMGNWSNTTY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnValThrSerLy8AlaPheGlnHi8AspThrTrpAsnSerGlyLeuThrValAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerālaālaValīleSerārgālaGluThrīleAsnālaThrValProLysThrīleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValIlePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSerSer
                                                                                                                                                                                                                                                                                                                                                                          TTYATHCCNGARCAYAARCCNACNGAYTAYAARAARGARAAYACNGGNCCNYTNGARACN
                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAYAAYWSNWSNGARCARGTNYTNTAYGTNGAYCCNATGATHACNGARATHAARGARATH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCNAAYATGAARAAYWSNAAYGTNGTNAARATGYTNCARGARAAYWSNGARYTNATGAAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MGNA CNGGNATHAARMGNMGNATHYTNYTNYTNATHCCNAARTGGYTNTA YGARGA YATH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATHWSNACNGGNCAYYTNACNWSNGAYAAYMGNGGNGAYATHGGNYTNYTNYTNGGNATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AARMGNTAYTGGCARCCNTGGWSNWSNCCNTTYTTYCAYAARACNCCNGARACNGTNCCN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GARTTYTAYYTNGARCCNAAYATHAARTAYGTNTTYCARGTNMGNTGYCARGARACNGGN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACNAAY CARACNTGGAAY GTNAARGARTTY GAYACNAAY TTY ACNTAY GTNCARCARWSN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAYTGGGAYWSNCARACNACNATHGARAARGTNWSNTGYGARATGWGNTAYAARGCNACN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCNYTNGGNATGGARGARWSNAARCARYTNCARATHCAYYTNGAYGAYATHGTNATHCCN
                                       AAYCCNMGNYTNCARAARCAYCCNAAYTTYGCNTTYWSNGTNWSNWSNGTNAAYWSNYTN
                                                                                                                                                                                                                                                                                          1440
                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                         1500
                                                                                                                                                                                                                                                                                                                                                                                                                 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                         1560
                                                                                                                                                                                                                                                   500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      780
```

ફ 음 성

8 8 8 8

8 8 8 8 8 8

8 8 8

멍 र्

र् 멍 8 유왕 닭

8 8 8

8 8 8 8 8 8 8

밁

The present invention polypeptides HPR1 and

relates to human and murine haematopoietin receptor HPR2. Sequences of the invention are useful for

```
RESULT 10
RADJ8777
ID AADJ8 XX
XX
AADJ8
XX
AADJ8
XX
AADJ8
XX
AADJ8
XX
AADJ8
XX
AADJ8
XX
AOUSE
XX
MOUSE
XX
MOUSE
XX
MOUSE
XX
ADJ8
XX
MOUSE
XX
MOUSE
XX
ADJ8
XX
AOUSE
XX
ADJ8
XX
AOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mouse; haematopoietin receptor; receptor; HPR1; HPR2; cell proliferation; pancytopaenia; leukopaenia; anaemia; thrombocytopaenia; osteoporosis; neurodegenerative disorder; leukaemia; carcinoma; haematologic disorder; cancer; myelodysplastic syndrome; idiopathic thrombocytopaenic purpura; ITP; sickle cell vasocclusive crisis; myelofibrosis; myeloid metaplasia; osteoclast disorder; periodontitis; acute polyneuropathy; Bell's palsy; anorexia nervosa; chronic fatigue syndrome; Creutzfeld-Jacob disease; demyelinating neuropathy; Guillain-Barre syndrome; Guif war syndrome; vertebral disc disease; myasthenia gravis; chronic neuronal degeneration; stroke; fatigue; tumour; sarcoma; osteoporosis; obesity; infertility; ischaemic disease; gene; ds.
                                                                                                                                    Human and murine hematopoletin receptor polypeptides HPR1 and HPR2, useful for treating cell proliferation, metabolic, and reproductive hormone related conditions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-OCT-2000; 2000US-0238706P
13-OCT-2000; 2000US-0240476P
20-FEB-2001; 2001US-0270282P
                                                                                   Claim
                                                                                                                                                                                                                                                                                                                                         Cosman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-OCT-2001; 2001WO-US031634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mouse haematopoietin receptor 2 (HPR2) DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAD38777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200229060-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1621 WSNAAYACNATHTTYYTNGGNGARYTNWSNYTNATHYTNAAYCARGGNGARTGYWSNWSN
                                                                                                                                                                                                                                                     2002-330172/36.
DB; AAE24038.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     561
                                                                                9; Page 135-136; 136pp;
                                                                                                                                                                                                                                                                                                                                      2
                                                                                                                                                                                                                                                                                                                                                                                          IMMUNEX CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTYAAYMGNATHWSNYTNYTNGARAAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      #SNGARACNATHCCNGARCARACNYTNYTNCCNGAYGARTTYGTN#SNTGYYTNGGNATH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProAspIleGlnAsnSerValGluGluGluThrThrMetLeuLeuGluAsnAspSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PheAsnArgIleSerLeuLeuGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTNAAYGARGARYTNCCNWSNATHAAYACNTAYTTYCCNCARAAYATHYTNGARWSNCAY 1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCNGAYATHCARAAYWSNGTNGARGARGARACNACNATGYTNYTNGARAAYGAYWSNCCN
                                                                                                                                                                                                                                                                                                                                      Mosley BA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag= a
/product= "Mouse HPR2 protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA;
                                                                                                                                                                                                                                                                                                                                         Bird
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1935
                                                                                                                                                                                                                                                                                                                                      TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВP
                                                                                   English.
                                                                                                                                                                                                                                                                                                                                         Dubose
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       629
                                                                                                                                                                                                                                                                                                                                            RF,
                                                                                                                                                                                                                                                                                                                                         SR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1680
```

```
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CC anaemia, thrombocytopaenia, neurodegenerative disorders and osteoporosis cresulting from a lack of bone-forming cells. They are also useful for treating cell proliferation conditions such as leukaemia and tumour cells. HPR sequences are also useful for treating medical conditions and diseases such as cell proliferation, metabolic and reproductive hormone cells. HPR sequences are also useful for treating medical conditions and diseases such as cell proliferation, metabolic and reproductive hormone cells. HPR sequences are useful for treating medical conditions and central cells. They are useful for treating medical conditions and central cells. Cc carcinoma, myelogenous leukaemia, colon, stomach, prostate, renal cell, cervical and ovarian cancers, lung cancer (SCIC and NSCIC), including cancer-associated cachexia, fatigue, solid tumours (e.g., osteosarcoma, carcinoma), carcinoma), haematologic disorders, anaemias (e.g., anaemia for example, breast cancer), cell carcinoma), haematologic disorders, anaemias (e.g., anaemia cell, cortanoic disease, aplastic anaemia, Fanconi's aplastic anaemia), myelo-dysplastic syndromes (including refractory anaemia, refractory anaemia cell paenic purpura (ITP), sickle cell vasocclusive crisis, myelofibrosis/cl paenic purpura (ITP), sickle cell vasocclusive crisis, myelofibrosis/cl myelofibrosis including post-menopausal osteoporosis, periodontitis cesulting in tooth loosening or loss, prosthesis loosening after joint ceplacement, neurodegenerative conditions (e.g., acute polyneuropathy, cl mysethenia gravis, chronic neuropatal disc disease, Gulf war syndrome, cerubral ischaemic diseases. HPRI and HPRZ polypeptides are also useful cerubral ischaemic diseases. HPRI and HPRZ polypeptides are also useful cerubral disc diseases, obesity, deficient mammary development and infertility. The present sequence is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-667-289-2 (1-629) x AAD38777 (1-1935)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     treating cell proliferation conditions e.g., pancytopaenia, anaemia, thrombocytopaenia, neurodegenerative disorders and
                                                                                                                                                                                         101
                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MetAsn***ValThrIleGlnTrpAspAlaValIleAlaLeuTyrIleLeuPheSerTrp
AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal
                                                                                  SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly
                                                                                                                                                                         CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                                                                           AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                                                                                                                                                                                                                ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                                                                                                                                                                                                                                                                                                                                CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGAGTCACCTCACACTTCAGCTGCATGTGGTGATAGCCCTTTATGTGCTCTTCAGATGG
                                                                TCTGGACATCCACCGGATGCCCCCAGCATCTGACATGTGTCATTTATGAATACTCAGGC
                                                                                                                                                   TGCACTGCTGAATGTCCTGGTCATTTTCAAGAGACACTGATTTGTGGGAAAGACATTTCC
                                                                                                                                                                                                                                   AATAGAACAACAGCTCGGATTTGGTATAAAGGCTTTTCGGAACCTCATGCCTATATGCAT
                                                                                                                                                                                                                                                                                                                     CCAAGGAATCTTTACTTTTATAAAAATGGCTTCAAAGAAGAATTTGATATCACAAGGATT
                                                                                                                                                                                                                                                                                                                                                                                                          ATTTTTCAGATGGGCATAAATGTTTCTATATATTGCCAAGAAGCCCTTAAGCACTGCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGTCACGGAGGAATCACAAGTATAAACTGCTCTGGTGACATGTGGGTTGAGCCTGGTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   607 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.76e-205
2280.50
78.2%
66.5%
68.6%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     G; 523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1935
432
76
115
27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              leukopaenia,
                                                                                                                                                   360
                                                                                                                                                                                         120
                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                             100
                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                    6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     40
                        160
                                                                420
                                                                                                        140
                                                                                                                                                                                                                                                                                                                                                                80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                            S
                                                                                밁
                                                                                                                      á
                                                                                                                                                                    밁
                                                                                                                                                                                               ેઇ
                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
  吊
                                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
    1498
                                                                                                                                                                                                                                                                                                                                                                                                                              1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1021
                                                                                    1438
                                                                                                                                                                                                                                                                                                                                            1258
                                          480
                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                    401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421 AACATGACATGCACCTGGAACACTGGGAAGCCTACCTACATAGATACCAAGTATATTTGTG
                                                                                                                                                                                                                                                                               AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCys-----------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn 180
    CTCAACACTGGATACAAACCCCAGGTTTCAAATGTTCCTCCTGGAGGAAACCTTTTCATT 1557
                        LeuAsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySerHisLeuSer
                                                                                    ACAAGAGACTGTCCTAGGAATGTTGTCTACCAGTTCTTCTGTTGTTGTATATTCCTGAC 1497
                                                                                                                                                                       TCTCCCCTGGAACACAAACCCACAGATTACAAAGAAGAAAGGCTCACAGGACTCCTTGAG
                                                                                                                                                                                                                                                                                                                                                                ProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ArgThrGlyIleLysArgArgIleLeuLeuLleProLysTrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTCTTCTTGGCCATCATGTTGCCGATTTTTTCTCTGATTGGGATATTTAACAGATCACTT 1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
:::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGGTTACAGCAAAATCA---TCCCACGAACCTCAGAAGATGGAGATGCTCAGTGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAGAAACTGGCAGCCTTGGAGTTCCCCCCTTTGTCCACCAAACTTCCCAAGAAACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerAlaAlaValI1eSerArgAlaGluThrI1eAsnAlaThrValProLysThrI1eI1e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValllePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                   ThrArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAsp 479
                                                                                                                                                                                             PhelleProGluHisLysProThrAspTyrLysLysGluAsn---ThrGlyProLeuGlu 459
                                                                                                                                                                                                                                                                                                                                            CCTAATATGGAAAATAGCAATGTTGCAAAATTATTACAGGAAAAAAGTGTATTTGAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                              CGAATAGGAATTAAAAGGAAAGTTTTACTGATGATCCCAAAGTGGCTTTATGAAGATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAGAAACTGGCAGCCTTGGAGTTCCCCCCTTCGTCCACCAAACTTCCCAGACAGTTTCC 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TACTGGAAAAGCAAAACTATGATTGAGAAAGTATTCTGTGAGATGAGATACAAAACAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTGCGTCCATCATTTCCAGGGCTGAGACTACAAACGATACTGTACCCAAGACCATAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCCTAGGCATGGAGAACTCACAACTACACGTCCATCTGGATGATATAGTGATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCTCCACTGACTCACTGCAAGGCAGCAGGAAGTATTTGGTATGGGTCCAAGCTGTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCTTCAGAGGACATCCTGCTTCAGGTAATCATCAAGACATTGGACTTTTGTCGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ------GlnGluThrGly 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAAACCAAACGTGGAGTGTTAAAGAATTTGACGCCAATTTCACATATGTACAGCAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1077
                                                                                                                                                                       1437
                                                                                                                                                                                                                                                                                                                                            1317
                                                                                                                                                                                                                                                                                                                                                                                                                                1257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        840
                                              499
                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                296
```

δ 밁 S

S 몽 S 밁 Ś

밁

S 밁 ঠ

밁

```
RESULT 11
AAP87821
ID AAP87821
XX AAP87
XX AAP87
XX AAP87
XX 11-JU
XX Human
XX Human
XX Homo
XX Homo
XX Homo
XX Homo
XX FT CDS
F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 8 8 8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; haemopoietin receptor protein; NR12; immunosuppressive; antiallergic; haemopoietin factor; autoimmune disease; tissue rejection; metal allergy; pollen allergy; ss.
                     Claim
                                                                          New hemopoietin receptor protein NR12 useful for screening for binding factors for potential treatment of autoimmune disease,
                                                                                                                                                                                                                                                               27-SEP-1999; 99JP-00273358.
03-AUG-2000; 2000JP-00240397.
                                                                                                                                                                                                                                                                                                                        27-SEP-2000; 2000WO-JP006654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAF87821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAF87821 standard;
                                                        rejection and allergies.
                                                                                                                                                                                           Maeda
                                                                                                                                                                                                                                                                                                                                                                                                  WO200123556-A1.
                                                                                                                                                                                                                              (CHUG-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1609
                                                                                                                                                    2001-266154/27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   500
                                                                                                                                                                                           Z,
                     1; Fig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  haemopoietin
                                                                                                                                                                                                                              CHUGAI RES INST MOLECULAR
                                                                                                                                  AAB74966.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HisPheAsnArgIleSerLeuLeuGluLys 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProSerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTCTTGACATAAAAACTCAAGACAGGAGGAGAACCAGCATCGTTTTGCAAAGTGACTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerProAspIleGlnAsnSerValGluGluThrThrMetLeuLeuGluAsnAspSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LeuSerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----GCCAGATTGAAAAGATATCCCAACTTCCAATTTTCTGCTTCAAGTATGGCTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AsnAsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ||| ::: ||| | ACAGAGATGAAAAGAGACCTACATCCCTTTGAGACCACAGATGACCACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCAGTGAAACTATCCCAGCGCAGACTCTGTTGTCTGATGAATTTGTCTCCTGTTTGGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTANACANA CACTANTTCTTGATGANTTGTGCCTCGTTTTANATCANGGNGANTTCANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AsnAsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSerGly
                                                                                                                                                                                         Yaguchi N
                     11; 140pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first
                                                                                                                                                                                                                                                                                                                                                                                                                                  /*tag= a
/product= "NR12.4"
/note= "haemopoietin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .1287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                receptor protein NR12.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDNA; 1301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                дB
                                                                                                                                                                                                                                MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                       receptor protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                encoding cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ħ
                                                                              tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NO:7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No.:
Score:
Score:
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         នន្តន្តន្តន្តន
   유
                                                                            밁
                                                                                                     Ś
                                                                                                                                                문
                                                                                                                                                                             5
                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                          ક
                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-667-289-2 (1-629)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present sequence encodes a human haemopoietin receptor protein NR12 designated NR12.4. NR12 has immunosuppressive and antiallergic activities. NR12 can be used for searching for haemopoietin factors with the potential for controlling autoimmune disease, tissue rejection and allergies against e.g. metals and pollen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1301 BP; 432 A; 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scores:
                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
   781
                                       261
                                                                              721
                                                                                                               241
                                                                                                                                                                                         221
                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                 201
                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                    161
                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ь
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MetAsn***ValThrileGlnTrpAspAlaVallleAlaLeuTyrIleLeuPheSerTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrasnGlnThrTrpasnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                       TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                                                                                                                                                           SerAlaAlaVallieSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle
                                                                                                                                                                                                                                                    AlaLeuGlyMetGluGiuSerLysGlnLeuGlnIleHisLeuAspAspIleValllePro
                                                                                                                                                                                                                                                                                                                                                                                                          HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerGlyTyrProProAspIleDroAspGluValThrCysVall1eTyrGluTyrSerGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGAATCAGGTCACTATTCAATGGGATGCAGTAATAGCCCCTTTACATACTCTTCAGCTGG
                                                                                                                                                                                                                                GCACTAGGCATGGAAGAGTCAAAACTACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                                                                                                                                                                          ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                            IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                 CATGTGAAGAGTTTAGAGACAGAAGAAGAAGAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                              TATTGGGATAGTCAAACAACTTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                        TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2.4e-197
2192.00
99.3%
99.3%
65.9%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               x AAF87821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (1-1301)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         262 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1301
410
0
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           U; 0 Other,
```

360 120 300

840

780 260 720 240 660 220 600 200 540 180 480 160 420 100

240 80 120

6 8

6

```
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     日
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                  CDS
                                                                                                                                                                                                                                                                                                                Human; haemopoietin receptor protein; NR12; immunosuppressive; antiallergic; haemopoietin factor; autoimmune disease; tissue metal allergy; pollen allergy; ss.
                            New hemopoietin receptor protein NR12 useful for screening for binding factors for potential treatment of autoimmune disease, rejection and allergies.
                                                                                                                                         27-SEP-1999; 99JP-00273358.
03-AUG-2000; 2000JP-00240397.
                                                                                                                                                                                                                                                                                                                                                                                                                      AAF87819
                                                                                                                                                                       27-SEP-2000; 2000WO-JP006654
                                                                                                                                                                                                                                                                                                                                                           Human
                                                                                                                                                                                                                                                                                                                                                                               11-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                   AAF87819;
                                                                                                                                                                                                                WO200123556-A1
                                                                                                                      (CHUG-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1021
                                                                     2001-266154/27.
DB; AAB74964.
                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 281
           <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                         haemopoietin receptor protein NR12.2 encoding cDNA
          Fig
                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCTAATATGAAAAACAGCAATGTTGTGAAAAATGCTACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProAsnMetLysAsnSerAsnValValLysMetLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ArgThrGlyIleLy8ArgArgIleLeuLeuLeuIleProLy8TrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCGTCTTTGCTGTTATGTTGTCAATTCTTTTGATTGGGATATTTAACAGATCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                 Yaguchi
          5
                                                                                                                                                                                                                                                                                                                                                                               (first
          140pp;
                                                                                                                                                                                                                                                                Location/Qualifiers 98. .1384
                                                                                                                                                                                                                                          /*tag= a
/product= "NR12.2"
                                                                                               N;
                                                                                                                                                                                                                                  note= "haemopoietin receptor protein"
                                                                                                                                                                                                                                                                                                                                                                                                                      CDNA;
          Japanese
                                                                                                                        MOLECULAR
                                                                                                                                                                                                                                                                                                                                                                                                                      1479
                                                                                                                                                                                                                                                                                                                                                                                                                      ₽₽
                                                                                                                      MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  413
                                                                                                                                                                                                                                                                                                                                                          SEQ ID
                                                                                                                                                                                                                                                                                                                             rejection;
                                        new
tissue
                                                                                                                                                                                                                                                                                                                                                            NO:3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
Pred. No.:
Score:
             δ
                                 F
                                                      ð
                                                                           밁
                                                                                           S
                                                                                                                    밁
                                                                                                                                    Ş
                                                                                                                                                       밁
                                                                                                                                                                                                   밁
                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                    맑
                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               នន្តន្តន្តន្ត្
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-667-289-2 (1-629) x AAF87819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence encodes a human haemopoletin receptor protein NR12 designated NR12.2. NR12 has immunosuppressive and antiallergic activities. NR12 can be used for searching for haemopoletin factors with the potential for controlling autoimmune disease, tissue rejection and allergies against e.g. metals and pollen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1479
                                                                                                                      869
                                                                                                                                                              638
                                                                                                                                                                                                     578
                                                                                                                                                                                                                                            518
                                                                                                                                                                                                                                                                141
                    261
                                                           241
                                                                               758
                                                                                                 221
                                                                                                                                                                                 181
                                                                                                                                                                                                                        161
                                                                                                                                                                                                                                                                                     458
                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                            398
                                                                                                                                                                                                                                                                                                                                                101
                                                                                                                                                                                                                                                                                                                                                                    338
                                                                                                                                                                                                                                                                                                                                                                                                             278
                                                                                                                                                                                                                                                                                                                                                                                                                                                   218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             158
                                                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ۳
                                                                                                                                                                                                                                                                                                                                                                                                           ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                             AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValllePro
                                                                                                                                                                        IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                                                                                                                HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                                                                                                                                                            SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly
                                                                                                                                                                                                                                                                                                                                          CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                                                                                                                                                                                    ATTAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                 AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                              IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                                                                                                                                              ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                      CATGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                     TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTTTTAAGATGGGTGTGAATATCTCTATATATTGCCAAGCAGCAGTTAAGAACTGCCAA
                                         TATTGGGATAGTCAAACAACTTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                             TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP; 503 A; 292 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.17e-195
2175.00
99.0%
98.5%
65.4%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (1-1479)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative: Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                G; 386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               u;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1479
407
2
2
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0 Other;
```

60

277

40

217

877 260 817 240 757

```
ARGSULT 13
AACHS 149
ID AACHS
XX AACHS
AC AACHS
AC AACHS
XX INOULLI
KW Humar
XX Humar
XX Humar
XX Homo
XX Hom
XX Homo
XX Hom
X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             닭
The present invention describes a composition (I) comprising a recombinant DNAX cytokine receptor subunit-2 (DCRS2) polypeptide. The DCRS2 polypeptide is useful for binding ligands and for preparing antibodies. The DCRS2 polypeptide is also useful for modulating cell proliferation, for diagnostic and therapeutic applications, for detecting presence of their ligands and in drug screening assays. It is also useful for treating conditions such as immunological disorders. The present
                                                                                                                                                                           Novel composition comprising useful for regulating immune immunological disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; DNAX cytokine receptor subunit; DCRS2; receptor protein; modulating cell proliferation; diagnosis; detection; drug scree immunological disorder; ss.
                                                                                                                                                                                                                                                                                                     Dowling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAC88149 standard;
                                                                                                                                        Claim 16; Page 10-11; 93pp; English
                                                                                                                                                                                                                                                                                                                                                                            01-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                               30-MAY-2000; 2000WO-US014867
                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-DEC-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAC88149
                                                                                                                                                                                                                                                                                                                                          (SCHE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200073451-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  321
                                                                                                                                                                                                                                                                    2001-061536/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           281
                                                                                                                                                                                                                                                                                                       ž
                                                                                                                                                                                                                                                     AAB36646
                                                                                                                                                                                                                                                                                                                                          SCHERING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProAsnMetLysAsnSerAsnValValLysMetLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                       Timans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first
                                                                                                                                                                                                                                                                                                                                            CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDNA;
                                                                                                                                                                                                                                                                                                       úĊ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              receptor subunit-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 entry)
                                                                                                                                                                                                                                                                                                         Gorman
                                                                                                                                                                                              DNAX cytokine receptor subunit polypeptide system function and for treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВP
                                                                                                                                                                                                                                                                                                       Z,
                                                                                                                                                                                                                                                                                                         Kastelein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             413
                                                                                                                                                                                                                                                                                                         Bazan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          screening;
                                                                                                                                                                                                                                                                                                         길
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /rGlwAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NO:1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
Pred. No.:
Score:
Percent Similarity:
Best Local Similarity:
Query Match:
   유용
                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SXS
                                                           음 중
                                                                                                                                 밁
                                                                                                                                                                중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-667-289-2 (1-629)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                   281
                                                                        781
                                                                                                         261
                                                                                                                                            721
                                                                                                                                                                             241
                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                  221
                                                                                                                                                                                                                                                                                         109
                                                                                                                                                                                                                                                                                                                        201
                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21
 TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                                                                                                                                                                                                                     SerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                           HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTy
                                                                                                                                                                                                                  TCTGCAGCCGTCATTTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                         AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValllePro
                                                                                                                                                                                                                                                                                                                                                             ATCTCCACTGATTCATTACAAGGCGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                               IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                 CATGTGAAGAGTTTAGAGACAGAAGAAGAAGAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                encodes
                                                                        ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                              TATTGGGATAGTCAAACAACTTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                         GCACTAGGCATGGAAGAGTCAAAACTACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the human DCRS2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6.19e-183
2039.00
99.2%
99.2%
61.3%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               x AAC88149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ۸,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (1-1155)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u>ი</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1155
382
0
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0 Other,
                                                                                                       yrValGlnGlnSer
```

260 780 240 660 220 600 200 540 180 480 160 420 140 360 120 300 100 240 80 180 6 120 6 60

```
맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 14
      The invention describes a composition of matter (I) comprising a substantially pure or recombinant DNAX cytokine receptor subunit (DCRS2) polypeptide, a natural DCRS2 polypeptide, or a fusion pro
                                                                                                         Composition potentially useful for treating immunological disorders, comprises a DNAX cytokine receptor subunit 2 (DCRS2) polypeptide, a natural DCRS2 polypeptide, or a fusion polypeptide comprising a DCRS2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNAX cytokine receptor subunit 2; DCRS2; cell physiology; cell development; cell culture; interferon detection;
                                                                                                                                                                                                                                                          (DOWL/)
(TIMA/)
(GORM/)
(KAST/)
                                                                                                                                                                                                                                                                                                                                01-JUN-1999;
31-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                           18-SEP-2002; 2002US-00247463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADC07176;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADC07176 standard; cDNA; 1155
                                                                                                                                                                                                                                                                                                                                                                                                                                     US2003082734-AJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   immune system disorder; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA encoding human DNAX cytokine receptor subunit 2 (DCRS2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-DEC-2003
                                                                                                                                                                                                                                            (BAZA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1141 CCGAACTGGGATT 1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1021
                                                                                                                                                                    2003-730048/69.
DB; ADC07177.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                         TIMANS J C.
) GORMAN D M.
) KASTELEIN R A.
) BAZAN J F.
                                                                                                                                                                                                              FM,
                                                                                                                                                                                                                                                                                                     DOWLING L M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGGTCACATCAAAAGCATTCCAACATGACACATGGACATCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LygArgTyrTrpGlnProTrpSerSerProPhePheHigLygThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCGTCTTTGCTGTTATGTTGATTCTTTTCTTTGATTGGGATATTTAACAGATCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ANANGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -ArgThrGlyIle 384
                                                                 SEQ ID
                                                                                                                                                                                                                                                                                                                                99US-0137159P
2000US-00588113
                                                                                                                                                                                                               Timans JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                NO 1; 41pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  note= "DNAX cytokine receptor subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                product= "DCRS2"
                                                                                                                                                                                                                 Gorman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ₽P
                                                                                                                                                                                                               Ŋ,
                                                                                                                                                                                                               Kastelein
                                                                                                                                                                                                              RA,
receptor subunıt 2
e, or a fusion protein
                                                                                                                                                                                                               Bazan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity:
Query Match:
DB:
                                                           5
                                                                                                                                                                            ঠ
                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       999999999999999988%
         ફ
                                    밁
                                                                                              밁
                                                                                                                    ঠ
                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CC substantially pure or recombinant DCR22 polypeptide comprising at least three distinct nonoverlapping segments of at least four amino acids CC identical to segments of a fully defined 384 amino acid sequence (S1), CC given in the specification; a substantially pure or recombinant DCRS2 CC polypeptide comprising at least two distinct nonoverlapping segments of CC at least five amino acids identical to segments of S1; a natural sequence CC DCRS2 comprising S1; or a fusion polypeptide comprising a DCRS2 sequence. CC An agonist or antagonist of a mammalian DCRS2 is useful for modulating CC physiology or development of a cell or cell culture. Antibodies to a CC DCRS2 can be used for quantitative detection of interferon. The DCRS2 CC polypeptides and nucleic acids and their binding agents are potentially CC useful in treating and diagnosing disease, esspecially disease associated CC with the immune system. This sequence encodes humna DNAX cytokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-667-289-2 (1-629) x ADC07176 (1-1155)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              comprising a DCRS2 sequence. A composition of matter comprises: a
                                                                                                                                                                                                                                                                                                                                                          101
                                      601
                                                                201
                                                                                              541
                                                                                                                                                        481
                                                                                                                                                                                  161
                                                                                                                                                                                                               421
                                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                           181
                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MetAsn***ValThrIleGlnTrpAspAlaValIleAlaLeuTyrIleLeuPheSerTrp
                                                                                                               IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                                                                       HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                                                                                                                                                                                                          SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly
                                                                                                                                                                                                                                                                                                                                  TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                          CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                                                                                                                                                                                                                           AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
          SerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle
                                                          AlaIeuGlyMetGluGluSerLysGlnIeuGlnIleHisIeuAspAspIleValIlePro
                                                                                                                                                                                                                                 TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGAATCAGGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG
                                                                                                                                                        CATGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                 AACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCAAGGAAACTTCATTTTATAAAAATGGCATCAAAAGAATTTCAAAATCACAAGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₿₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       387 A; 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6.19e-183
2039.00
99.2%
99.2%
61.3%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ţ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1155
382
0
2
1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       U; 0 Other;
```

360 120 300 240 80 180 60 120 40 60

```
RESULT 15
ADZ65011
ID ADZ65
XX ADZ65
XX ADZ65
XX ADZ65
XX Immun
XX Immun
XX Immun
XX Immun
XX Pri CDS
Pri sig_p
Pri mat_p
Pri mat_p
Pri 19-MA
XX US200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          음 중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ 🔓 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                    01-JUN-1999;
31-MAY-2000;
18-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                    28-JUL-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                              ADZ65011;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADZ65011 standard;
  Dowling
                                                                                                         17-DEC-2004; 2004US-00016106
                                                                                                                                    19-MAY-2005
                                                                                                                                                                                                                 mat_peptide
                                                                                                                                                                                                                                          sig_peptide
                                                                                                                                                                                                                                                                                                                          Primates
                                                                                                                                                                                                                                                                                                                                                                                        DNAX cytokine receptor subunit 2 (DCRS2) DNA,
                             (SCHE ) SCHERING CORP.
                                                                                                                                                             US2005106673-A1
                                                                                                                                                                                                                                                                                                                                                   immune
                                                                                                                                                                                                                                                                                                                                                              Immunomodulator; cell growth; DNAX cytokine receptor subunits
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661
                                                                                                                                                                                                                                                                                                                                                   disorder;
  ž
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCGAACTGGGATT 1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ThrasnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCGTCTTTGCTGTTATGTTGTCAATTCTTTTGATTTGGGATATTTAACAGATCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -ArgThrGlyIle
                                                   99US-0137159P.
2000US-00588113.
2002US-00247463.
  Timans JC,
                                                                                                                                                                                                                                                                                                                                                                                                                   (first
                                                                                                                                                                                                   /product=
1. .69
/*tag= a
70. 1152
/*tag= c
                                                                                                                                                                                      /*tag= c
/product=
                                                                                                                                                                                                                                                                                   1. .1155
                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                   gene;
                                                                                                                                                                                                                                                                     *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                   entry)
                                                                                                                                                                                                                                                                     ٥
                                                                                                                                                                                                                                                                                                                                                    de.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1155
  Gorman
                                                                                                                                                                                                                                                       "DNAX cytokine receptor subunit
                                                                                                                                                                                         "Mature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ВP
  M,
  Kastelein
                                                                                                                                                                                                                                                                                                                                                                                       seq id
  Ŗ
  Bazan
                                                                                                                                                                                                                                                         2 (DCRS2) *
  JF;
                                                                                                                                                                                                                                                                                                                                                               <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                 DCRS2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score:
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                    S
                                                                         δ
                                                                                                       밁
                                                                                                                            S
                                                                                                                                                    밁
                                                                                                                                                                                 S
                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-667-289-2 (1-629) x ADZ65011 (1-1155)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a composition (I) of matter chosen from a substantially pure or recombinant DNAX cytokine receptor subunits 2 (DCRS2) polypeptide. Further disclosed is a substantially pure or isolated antigenic DCRS2 polypeptide (II) of (I), a fusion polypeptide (III) of (I) and a method for modulating (MI) the physiology or development of a cell or tissue culture cells comprising contacting the cell with an agonist or antagonist of a mammalian DCRS2. (MI) is useful for modulating the physiology or development of a cell or tissue culture cells. (I)-(III) are useful for diagnosing or treating immunological disorders. The current sequence represents the nucleotide sequence of DNAX cytokine receptor subunit 2 (DCRS2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Composition useful for diagnosing or treating immunological disorders, comprising pure or recombinant DNAX cytokine receptor subunits 2 (DCRS2) polypeptide or its fusion polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1155 BP; 387 A; 233 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; SEQ ID NO 1; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2005-365817/37.
P-PSDB; ADZ65012.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
0
::
                                                      481
                                                                                161
                                                                                                          421
                                                                                                                                  141
                                                                                                                                                             361
                                                                                                                                                                                      121
                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                            101
                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                               121
                           181
                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                      41
                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                         21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MetAsn***ValThrileGlnTrpAspAlaVallleAlaLeuTyrIleLeuPheSerTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                              CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                  HisvallysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                                        AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal
                                                                                                                                                                             SerGlyTyrProProAspIleProAspGluValThrCysVall1leTyrGluTyrSerGly
                                                                                                                                                                                                                                 CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                                                                                                      AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                                                                                                                                                                                                             ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                                                                                                                                                                                                                                                                                              IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGAATCAGGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG
                                                                                                                                                               TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                       AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                          TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                      CATGTGAAGAGTTTAGAGACAGAAGAAGAAGAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                          AACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                   TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6.19e-183
2039.00
99.2*
99.2*
61.3*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           223 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           312 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1155
382
0
```

600

180 480 160 420 140 360 120 300 100 240 80 120

6 60

GINTEUGINII EHISLEUASPASPII EVAIIIEPRO	381 -ArgThrGlyIle 384 1141 CCGAACTGGGATT 1153	361 IleValPheAlaValMetLeuSer	341 IleSerThrGlyHisLeuThrSet	321 GlnValThrSerLysAlaPheGlr 961 CAGGTCACATCAAAAGCATTCCAA	301 LysArgTyrTrpGlnProTrpSet	281 GluPheTyrLeuGluProAsnIle 	261 ThrAsnGlnThrTrpAsnVallys 181 ACANACCAAACTTGGAATGTTAAA	241 TyrTrpAspSerGlnThrThrIle	221 SerAlaAlaVallleSerArgAla 	201 AlaLeuGlyMetGluGluSerLys
		IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe	IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet 36 	GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer 34	LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro 32 	GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly 30 	ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer 28	TyrTrpAspSerGlnThrThrIleGluLy8ValSerCy8GluMetArgTyrLy8AlaThr 26 	SeralaalavallieSerargalaGluThrileAsnalaThrValProLy8Thrileile 24 	AlaLeuGlyMetGluGluSerLy8GlnLeuGlnIleHi8LeuAgpAspIleVallIePro 22

Search completed: October 14, 2006, 14:43:03 Job time : 1093 secs

음 성 음

8 & 8

음 성 음 성

8 8 8 8 8

This Page Blank (uspto)

a

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -MODEL-Frame+ D2n.model -DEV-x1h
-Q-/Abss/ABSWEB spool/US10667289/runat 13102006 111535 24405/app query.fasta_1
-Q-/Abss/ABSWEB spool/US10667289/runat 13102006 111535 24405/app query.fasta_1
-DB=EST -QFWT=fastap -SUFFIX-p2n.rst -WINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0
-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human140.cdi -LIST=45
-DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15 -MODE=LOCAL
-UNITWT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000 -HOST=abss03h
-USER-US10667289 @GCN 1 1 6323 @runat 13102006 111535 24405 -NCPU=6 -ICPU=3
-NO_MAAP -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV_TIMEOUT=120
-WARN_TIMEOUT=30 -THREADS=1 -XGAPDP=10 -XGAPEXT=0.5 -FGAPDP=6 -FGAPEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Command line parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OM protein - nucleic search, using frame_plus_p2n model,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                      Score
      1009
877
857
833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-667-289-2
3326
1 MNXVTIQWDAVIAL
                                                                                                      Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   October 14, 2006, 14:28:30 ; Search time 7918 Seconds (without alignments) 6663.285 Million cell updates/sec
                                                                                                                                                                                                                                                                                        8:
9:
10:
11:
12:
13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EST:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       48236798 seqs, 27959665780 residues
      30.3
26.4
25.8
25.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MNXVTIQWDAVIALYILFSW.....TYFPQNILESHFNRISLLEK 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Copyright
                                                                                                                                                                                                                                                                                gb est8: *
gb est8: *
gb est8: *
gb gss1: * *
gb gss2: * *
gb gss3: * * *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gb_est1:*
gb_est3:*
gb_est4:*
                                                                                                                                                                                                                                                                                                                                                                                                             gb_htc:*
gb_est2:*
gb_est7:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gb_est5:*
gb_est6:*
                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GenCore version 5.1.9 (c) 1993 - 2006 Biocceleration Ltd.
                                                                                                          명
  BQ228535
BP282008
BF210400
BF209716
                                                                                                        Ħ
                                                                                                                                                                 SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.5
7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96473596
BQ228535 AGENCOURT
BP282008 BP282008
BF210400 601874484
BF209716 601874259
                                                                                                      Description
```

a

Ω

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	ر. ن
167.5	68.	68.	169	17	~1	٠.	177	177.5	178.5	181.5	181.5	187	187.5	189	191.5	192	195	199	199.5	205.5	218	240	240.5	244.5	256.5	257	283	412.5	415		449.5	451	624.5	642	673.5	707	756	786		824.5
5.0	5.1	•	•	5.2	•	٠	٠	ت. ن	٠	٠	٠	5.6	•	•	•	5. 8	•				6.6		•	7.4	•	7.7	•	•	•	•	w	13.6	œ	9	20.2	ŗ	۲.	٠	23.9	
635	909	584	695	4145	2845	2535	1402	1455	699	3948	2804	626	887	704	628	695	4460	672	1822	5264	794	949	3055	619	1512	844	795	757	628	651	569	430	842	513	540	825	602	720	823	917
Ν	14	ø	4	σ	0	14	σ	9	4	6	6	4	ŋ	14	4.	14	σ	11	6	ი	14	w	6	4	o	12	w	7	14	14	11	7	7	7	7	12	ហ	4.	7	7
89310	4166	387	BX849563	AK155524	AK145864	AY412154	CNS0FSV8	DN685150	CB168262	AK144318	AK089305	CA893723	CF780723	CR102197	CB427282	CT346894	CR858901	AZ418811	CNSOFONW	BC071555	CT440157	BU913664	AY310138	BX736370	BC020454	CC515253	BU426382	BF211696	AG154727	AG176412	AQ699233	BF185326	F183	F23918	21274	965	D70894	B42998	3886	BF238439
pgm2n.pk0	416683 Pan t	38786 DB238	9563 BX84	Mus n	5864 Mus	54	etra	Š	SF60326	8	AK089305 Mus muscu	CA893723 B0181A01-	GENCOURT		02850 MA	a ans		M		Homo	CT440157 Sus scrof	AGENCOL	AY310138 Rattus no	BX736370 BX736370	BC020454 Mus muscu	CC515253 CH240_360	60	60	Pan t	Ţ	=	8	183992	183	212748	496590		429984 605838 M	869 60190449	38439 6

O

a

ALIGNMENTS

٠																					
				COMMENT	JOURNAL	TITLE	AUTHORS	REFERENCE				ORGANISM	SOURCE	KEYWORDS	VERSION	ACCESSION		DEFINITION	rocus	BQ228535	RESULT 1
http://image.llnl.gov plate: LLAM13331 row: h column: 17 High quality sequence stop: 554.	DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can be	cDNA Library Preparation: Life Technologies, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)	Email: cgapbs-r@mail.nih.gov Tissue Procurement: ATCC/DCTD/DTP	Contact: Robert Strausberg, Ph.D.	Unpublished (1999)	National Institutes of Health, Mammalian Gene Collection (MGC)	NIH-MGC http://mgc.nci.nih.gov/.	1 (bases 1 to 916)	Hominidae; Homo.	Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	Homo sapiens	Homo sapiens (human)	EST.	BQ228535.1 GI:20409935	BQ228535	5', mRNA sequence.	T_7594648 NIH_MGC_72 Homo sapiens cDNA clone	BO228535 916 bp mRNA linear EST 02-MAY-2002		

```
밁
                                                                         밁
                                                                                                          S
                                                                                                                                                        밁
                                                                                                                                                                                    ફ
                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                    중 음 중
                                                                                                                                                                                                                                                                                                                                                                                     8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               श्च
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-667-289-2 (1-629)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    No::
    533
                                       484
                                                                              473
                                                                                                                   464
                                                                                                                                                          413
                                                                                                                                                                                                 444
                                                                                                                                                                                                                                        353
                                                                                                                                                                                                                                                                               424
                                                                                                                                                                                                                                                                                                                      293
                                                                                                                                                                                                                                                                                                                                                           404
                                                                                                                                                                                                                                                                                                                                                                                                                                       384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      186
                                                                                                                                                                                                                                                                                                                                                                                                    234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPheArgThrGlyIl 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           uGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGlyLysArgTyrTr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TrpAsn-VallysGluPheAspThrAsnPheThrTyrValGlnGlnSerGluPheTyrLe
TAMACCCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAATAATAATGAAAT
                        rLysProGlnIleSerAsnPheLeuProGluGlySerHisLeuSerAsnAsnAsnGluIl
                                                                                                    oGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAspLeuAsnThrGlyTy
                                                                                                                                                                                  uHisLysProThrAspTyrLysLysGluAsnThrGlyProLeuGluThrArgAspTyrPr
                                                                                                                                                                                                                                        TGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATCTTCATCCCAGA
                                                                                                                                                                                                                                                                    rGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIlePheIleProGl
                                                                                                                                                                                                                                                                                                                    AAACAGCAATGTTGTGAAAATGCTTACAGGAAAATAGTGAACTTATGAATAATTCCAG
                                                                                                                                                                                                                                                                                                                                      sAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsnAsnAsnSerSe
                                                                                                                                                                                                                                                                                                                                                                                                                    eLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIleProAsnMetLy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          pGlnProTrpSerSerProPhePheHisLysThrProGluThrValProGlnValThrSe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAAAAAGGTACTG
                                                                              GCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTCAACACTGGATA
                                                                                                                                                            ACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACAAGAGACTACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 yHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMetIleValPheAl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           {\tt rLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSerIleSerThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunderserThrGlunder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /tissue_type="melanotic melanoma"
/lab_host="DH10B (phage-resistant)"
/clone_lib="WIH MGC_72"
/note="Organ: skin; Vector: pCMV-SPORT6; Site_1: Not1;
/site_2: Sall; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 2 kb. Library constructed by Life Technologies."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /db_xref="taxon:9606"
/clone="IMAGE:6061504"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2.85e-103
1009.00
66.0%
63.7%
30.3%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          x BQ228535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -----ACAGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (1-916)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 916
223
8
8
27
93
                                                                                                                                                                                                                                                                                                                                                           424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       304
                                       504
                                                                                                                     484
                                                                                                                                                                                                 464
                                                                                                                                                                                                                                                                               444
                                                                                                                                                                                                                                                                                                                                                                                                                                       404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               344
    592
                                                                              532
                                                                                                                                                            472
                                                                                                                                                                                                                                        412
                                                                                                                                                                                                                                                                                                                                                                                                    292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        225
                                       Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 2
BP282008
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                     Score:
                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
    US-10-667-289-2
                                                                                                                                       Pred. No.:
                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   584 eProGluGlnThrLeuLeuPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP282008

BP282008 Sugano cDNA library, clone KMR03033, mRNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                  Email: ysuzuki@hgc.jp.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Yutaka Suzuki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15342556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP282008.1 GI:52195740
                                                                                                                                                                                                                                                                                                                                                                                                                                           Fax: 81-3-5449-5416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCTGGAGAGAATTTGGCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCCAAT--
    (1-629)
                                                                                                                                                                                                                                    /tissue_type="bone marrow"
/cell_line="K562"
/clone_lib="Sugano cDNA li
                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                   /clone="KMR03033"
                                                       1.44e-88
877.00
99.4%
99.4%
26.4%
  ×
                                                                                                                                                                                                                                                                                                                                                                                   . 583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -GluAsnAspSerPro----
    BP282008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sequence.
    (1-583)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     591
                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              , bone
```

```
Hominidae; Homo.

1 (bases 1 to 583)

Suzuki, Y. Yamashita, R., Shirota, M., Sakakibara, Y., Mizushima-Sugano, J., Nakai, K. and Sugano, S. Sequence comparison of human and mouse genes reveals block structure in the promoter regions Genome Res. 14 (9), 1711-1718 (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Department of Virology
Institute of Medical Science, University of Tokyo
1-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Tel: 81-3-5449-5343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rValAsnSerLeuSerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAGAATGCAGTTTCTTCCTGGAACTTACCAAACTCCCGTAGAAGGAGGAAACCCCCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         yGlu-----CysSerSerProAspIleGlnAsnSerValGluGluGluThrThrMetLe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTACAAAAGCATCCTAAATTTTGCTTTTTTCTGGTTCCAAGGGGGAATTTCCCCTAAGCCA
                                                                                                                                                                                            /clone lib="Sugano cDNA library, bone marrow K562"
/note="chronic myelogenous leukemia"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -ATTTCTTTGGAGAAATTAAGCCTCCTTATTAAATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mRNA linear
marrow K562 Homo
168
0
0
1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                reveals a homologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerGluThrIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chiba, J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sapiens cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST 16-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         523
```

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 3
BF210400
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                    Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       284 uGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGlyLysArgTyrTr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BF210400 754 bp mRNA linear EST 06-NOV-2000 601874484F1 NIH MGC_54 Homo sapiens cDNA clone IMAGE:4101164 5', mRNA sequence.
BF210400
                                                                                                                                                                                                                                                                              Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 754)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BF210400.1 GI:11103986
                                                                                                                                found through the I.M.A.G.E. Consortium/LLNL
http://image.llnl.gov
Plate: LLCM972 row: g column: 21
High quality sequence stop: 650.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                  Contact: Robert
                                                                                                                                                                                                                                                                                                                                                                                                  Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HOMO
                                                                                                                                                                                                             CDNA Library Preparation: CLONETECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Consortium (Clone distribution information can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rGluGlnValLeuTyrValAspPro 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8A8nSerA8nValValLy8MetLeuGlnGluA8nSerGluLeuMetA8nA8nA8nA8nSerSe 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTTATGTTGTCAATTCTTTCATTGGGATATTTAACAGATCATTCCGAACTGGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPheArgThrGlyIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATGATCGTCTTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     yHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMetIleValPheAl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCCATCTCTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSerIleSerThrGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCCAGGTCACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    pGlnProTrpSerSerProPhePheHisLysThrProGluThrValProGlnValThrSe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TrpAsn-ValLysGluPheAspThrAsnPheThrTyrValGlnGlnSerGluPheTyrLe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGAGCAGGTCCTATATGTTGATCCC 582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAATAATAATTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAAAAGGTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGGAACTGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGAATTCTACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                sapiens (human)
/tissue_type="from chronic myelogenous leukemia"
/lab_host="DH10B (T1 phage-resistant)"
/clone_lib="NIH_MGC_54"
                                                 /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:4101164"
                                                                                                   organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   257
      RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
```

C, or G and N = A, C, G, or T). Average insert size $1.75~\rm kb$ (range 0.9-4.0 kb). $15/15~\rm colonies$ contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo Alto, CA)." /note="Organ: bone marrow; Vector: pDNR-LIB (Clontech); Site 1: Sfil (ggccgctcggcc); Site 2: Sfil (ggccattatggcc); Double-stranded cDNA was prepared from cell line RNA. 5' and 3' adaptors were used in cloning follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' at 3' adaptor sequence: 5'-CACGGCCATTATGGCC-3' at 3' adaptor sequence: 5'-ATTCTAGAGGCCGAGGGCGGCCGACATG-dT(30)BN-3' (where B = A) B = A, and 86

τί. qα	Оу 48	Db 66	Оу 46	Db 61	Qy 44	Db 55	Оу 424	Db 49	Оу 404	Db 43	0у зв	Db 37	Qу 36	Db 31	0у 34	Db 25	Qy 32	pb 19	Qy 30	ם מם	Оу 28	Db . 7	0у 26	US-10-667-28	Pred. No.: Score: Percent Similarity: Best Local Similarity: Query Match: DB:	STIGHTEN OF
18 T 718			64	12	44 uHisLysProThrAspTyrLysLysGluAsnThrGlyProLeuGluThrArgAspTyrPr 464	56	.24 rGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIlePheIleProGl 444	96	04 sAsnSerAsnValLysMetLeuGlnGluAsnSerGluLeuMetAsnAsnAsnSerSe 424	37	84 eLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIleProAsnMetLy 404	78	64 aValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPheArgThrGlyIl 384	318 GCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATGATCGTCTTTGC 377	44 yHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMetIleValPheAl 364	158 AAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCCATCTCTACAGG 317	24	86	04 pGlnProTrpSerSerProPhePheHisLysThrProGluThrValProGlnValThrSe 324	38	.84 uGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGlyLysArgTyrTr 304	8	65 TrpAsn-ValLysGluPheAspThrAsnPheThrTyrValGlnGlnSerGluPheTyrLe 284	189-2 (1-629) x BF210400 (1-754)	4.14e-86 Length: 754 857.00 Matches: 189 1.9% Conservative: 14 Similarity: 85.5% Mismatches: 12 1.: 25.8% Indels: 11 7 Gaps: 4	

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
S
                                                                       밁
                                                                                                                        8
                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-667-289-2 (1-629) x BF209716 (1-820)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bource
                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                     431 ABPPrOMetIleThrGluIleLysGluIlePheIleProGluHi8LysProThrABpTyr
   491
                                                                                                                                       471
                                                                                                                                                                                                                                                 451 LysLysGluAsnThrGlyProLeuGluThrArgAspTyrProGlnAsnSerLeuPheAsp
                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: cgapbs-remail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 820)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  found through the I.M.A.G.E. Consortium/LLNL http://lmage.llnl.gov plate: LLCM966 row: f column: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BF209716.1 GI:11103302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CDNA Library Preparation: CLONETECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can
                                                                                                                 AsnThrThrValValTyrIleProAspLeuAsnThrGlyTyrLysProGlnIleSerAsn 490
                                                                                                                                                                                                              AAGAAGGAGAATACAGGATCCCTGGAGACAAGAGACTACCCGCAAAACTCGCTATTCGAC
                                                                                                                                                                                                                                                                                                                                                 GATCCCATGATTACAGAGATAAAAAGAAATCTTCATCCCAGAACACAAGCCTACAGACTAC
                                                                       AATACTACAGTTGTATATTCCTGATCTCAACACTGGATATAAACCCCCAAATTTCAAAT
   PheLeuProGluGlySerHisLeuSerAsnAsnAsnGluIleThrSerLeuThrLeuLys 510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               quality sequence stop: 608.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="Organ: bone marrow; Vector: pDNR-LIB (Clontech); Site 1: SfiI (ggccgctcggcc); Site 2: SfiI (ggccgctcggcc); Site 2: SfiI (ggccgctctggcc); Mass prepared from cell line RNA. 5' and 3' adaptors were used in cloning follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and colored the colored that the colored the colored that 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3' adaptor sequence:
5'-ATTCTAGAGGCCGAGGCCGGCGACATG-dT(30)BN-3' (where B = A,
5'-ATTCTAGAGGCCGAGGCCGGCGACATG-dT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size
1.75 kb (range 0.9-4.0 kb). 15/15 colonies contained
inserts by PCR. This library was enriched for full-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /tissue_type="from chronic myelogenous leukemia"
/lab_host="DH10B (T1 phage-resistant)"
/clone_l1b="NIH_MGC_54"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  clone="IMAGE:4098831"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                lones and was constructed by Clontech
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2.56e-83
833.00
89.8%
89.3%
25.0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chordata; Craniata; Vertebrata; Euteleostomi; Buarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          820 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens cDNA clone IMAGE:4098831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     820
182
3
14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Laboratories (Palo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EST 06-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5',
                                                                                                                                                                                                                                                                                                                                                                                                                     450
                                                                                                                                                                                                                                                                              470
                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and
                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98
```

```
JOURNAL COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 5
BF238439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  628 uLys 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600 CAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: cgapbs-remail.nih.gov
Tissue Procurement: ATCC
CDNA Library Preparation: CLONETECH Laboratories, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
http://image.llnl.gov
Plate: LLCM1032 row: e column: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hominidae, Homo.
1 (bases 1 to 917)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BF238439.1 GI:11152359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601904735F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4132593 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BF238439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LeuIleLeuAsnGlnGlyGluCysSerSerProAspIle-GlnAsnSerValGluGluGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      snThrTyrPheProGln-AsnIle-LeuGluSerHisPheAsnArgIleSerLeuLeuGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           euProAspGluPhe-ValSerCys-LeuGlyIleValAspGlu-GluLeuProSerIleA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 uThrThrMetLeu-LeuGluAsnAspSerProSerGluThrIleProGluGlnThrLeuL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AlapheSerValSerSerValAsnSerLeuSerAsnThrIlePheLeuGlyGluLeuSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProProValAspSerLeuAspSerGlyAsnAsnProArgLeuGlnLysHisProAsnPhe 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATATTTATTTTCCACAAAATATTTGTGGAAAGCCACTTCAATAGGATTTCACTCCTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACCACCATGCTTTGTGGAAAATGATTCACCCAGTGAAACTATTCCAGAACAAGACCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCATATTAAATCAAGGAGAATGCAGTTCTCCTGACATAACAAAACTCAGTAGAGGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTTTTCTGTTTCAAAGTGTGAATTCACTAAGCAACACAATATTTCTGTGGAGAATTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCACCAGTTGATTCCTTAGACTCAGGAAATAATCCCCAGGTTACAAAAAGCATCCTAATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                 quality sequence stop: 575.
/organisme"Homo sapiens"
//organisme"Homo sapiens"
//db_xref="taxon:9606"
//db_xref="taxon:9606"
//db_xref="taxon:9606"
//tissue_type="from chronic myelogenous leukemia"
//tissue_type="from chroni
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        603
                                                                                                                                                                                                                                                                                                                                                                                                                  ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  917 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EST 14-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ď,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                239
```

```
RESULT 6
BF238869
LOCUS
              KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-667-289-2 (1-629)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                         DEFINITION
                                            VERSION
                                                           ACCESSION
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     No.:
                                                                                                                                                                                                                                                            443
                                                                                                                                                                                                                                                                                          556
                                                                                                                                                                                                                                                                                                                         424
                                                                                                                                                                                                                                                                                                                                                       496
                                                                                                                                                                                                                                                                                                                                                                                    404
                                                                                                                                                                                                                                                                                                                                                                                                                   438
                                                                                                                                                                                                                                                                                                                                                                                                                                                 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 284
                                                                                                                                                                   669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               78
                                                                                        BF238869
601904492F1 NIH_MGC_54
                                                                      mRNA sequence.
                                            BF238869.1 GI:11152790
                                                                                                                                                                                                                                                  oGluHisLysProThrAspTyrLysLysGluAsnThrGlyProLeuGluThrArgAspTy 463
                                                                                                                                                                                                                                                                                                          er-GluGlnValLeuTyrValAspProMetIleThrGluIle-LysGluIlePheIlePr 443
                                                                                                                                                                                                                                                                                                                                                                      ysäsnSeräsnValValLysMetLeuGlnGluäsnSerGluLeuMetäsnäsnäsnSerS 424
                                                                                                                                                                                                                                                                                                                                                                                                                                   leLysArgArgIleLeuLeuIleProLysTrpLeuTyrGluAspIleProAsnMetL 404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                laValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPheArgThrGlyI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               lyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMetIleValPheA 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       pGlnProTrpSerSerProPhePheHisLysThrProGluThrValProGlnValThrSe 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    uGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGlyLysArgTyrTr 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGAACTGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGAATTCTACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TrpAsn-ValLysGluPheAspThrAsnPheThrTyrValGlnGlnSerGluPheTyrLe
                                                                                                                                                                rProGlnAsnSerLeuPheAspAsnThrThrValVal 475
|||||||||:::|||||||||:::
-TAACCGAAATCGCTATTCGAAAATACTACGGTGTTA 704
                                                                                                                                                                                                                                                                                                                                                       AAAACAGCAATGTTGTGAAAAATGCTACAGGAAAATAGTGAACTTATGAATAATAATCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGTTATGTGGTCAATTCTTTCTTTGATGGGGATATTTAACAGATCATTCCGAACTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATGATCGTCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAAGCATTCCAACATGACATGGAATTCTGGGGCTAACAGTTGCTTCCATCTCTACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCAGGTCACATC
                                                                                                                                                                                                                                                                                                                                                                                                                    TTACAAGAAGGATCTTATG-TTAATACCAAAGTGGCT-TATGAAGATATTCCTAATATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rLysAlaPheGlnHisAspThrTrpAsnSer-GlyLeuThrValAlaSerIleSerThrG
                                                                                                                                                                                                                               AGAAAA-AAGGCTACAGACTACAGAAGGGACTA-CAGGACCCTGGGGAAAGGAGA-----
sapiens
              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             x BF238439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2.86e-82
824.50
88.8%
86.0%
24.8%
                                                                                         Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (1-917)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
                                                                                         3 bp m
                                                                                                          mRNA
                                                                                        nRNA linear EST 14-NOV-2000 CDNA clone IMAGE:4132295 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     917
185
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        344
                                                                                                                                                                                                                                                                                                                                                       555
                                                                                                                                                                                                                                                                                                                                                                                                                    495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               137
```

음 성

밁 S 밁 5 망 δ 밁 S 뭐 S 문 5 밁 Ś 밁 Ş

Ś

밁 श्च 멍

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMMENT
                     δ
                                                              밁
                                                                                                  ঠ
                                                                                                                                           밁
                                                                                                                                                                             ঠ
                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                           ₽
                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-667-289-2 (1-629) x BF238869 (1-823)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
По:
                                                                                                                                                                                 324
                                                                                                                                                                                                                            195
                                                                                                                                                                                                                                                                     304
                                                                                                                                                                                                                                                                                                             135
                         364
                                                                                                                                               255
                                                                                                                                                                                                                                                                                                                                                    284
                                                                                                                                                                                                                                                                                                                                                                                                                                     265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, M
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Plate: LLCM1031 row: h column: 24
High quality sequence stop: 584.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hominidae; Homo.
1 (bases 1 to 823)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CDNA Library Preparation: CLONETECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                                                                                     uGluProAsnIleLysTyrVal-PheGlnValArgCysGlnGluThrGlyLysArgTyrT 304
AlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPheArgThrGly
                                                                                       lyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeu-LeuGlyMetIleValPhe 363
                                                                                                                                                                                                                                                                                                                                                                                                                    TrpAsn-ValLysGluPheAspThrAsnPheThrTyrValGlnGlnSerGluPheTyrLe
                                                                                                                                               CAAAAGCATTCCAACATGACACGATGGAATTCTGGGCTAACAGTTGCTTCCATCTCTACAG
                                                                                                                                                                      erLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSerIleSerThrG
                                                                                                                                                                                                                            GGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCCCCAGGTCACAT
                                                                                                                                                                                                                                                      rpGlnProTrpSerSerProPhePheHisLysThrProGluThrValProGlnValThrS
                                                                                                                                                                                                                                                                                                               GGAGCCAAACATTAAGTACGTATCTTCAAGTGAGATGTCAAGAAACAGGCAAAAGGTACT
                                                                                                                                                                                                                                                                                                                                                                                            GGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTTGGGAATGATCGTCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /clone="IMAGE:4132295"
/tlssue_type="from chronic myelogenous leukemia"
/tlssue_type="from chronic myelogenous leukemia"
/lab host="UsH.DB (T1 phage-resistant)"
/clone_lib="NIH MGC 54"
/clone_lib="NIH MGC 54"
/note="Organ: bone marrow; Vector: pDNR-LIB (Clontech);
Site_1: SfiI (ggccgctcggcc); Site_2: SfiI
(ggccattatggcc); Double-stranded cDNA was prepared from cell line RNA. 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGGCATTATGGCC-3' and follows: 5' adaptor sequence:
5'-ATTCTAGAGGCCGAGGCGGCCGACATG-dT(30)BN-3' (where B = A, C, or G and N = A, C, G, or T). Average insert size
1.75 kb (range 0.9-4.0 kb). 15/15 colonies contained
inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7.09e-79
794.00
69.1%
63.8%
23.9%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      823
190
16
25
72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     þe
                         383
                                                                                                                                                                                                                                                                       324
                                                                                                                                                 314
                                                                                                                                                                                                                                254
                                                                                                                                                                                                                                                                                                               194
                                                                                                                                                                                                                                                                                                                                                                                              134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 86
```

```
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 7
CB429984/c
                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     457
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CB429984
605838 MARC 6BOV Bos tau:
CB429984
CB429984.1 GI:29205578
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           746
                                                                                                                               cross match v0.990329.
Plate: FQY8023 row: C
                                                                                                                                                               Single pass sequencing. Bases called with phred v0.020425.c and trimmed with the aid of the trim_alt option. Vector identified
                                                                                                                                                                                            Tel: 402 762 4366
Fax: 402 762 4390
Email: smith@email.marc.usda.gov
                                                                                                                                                                                                                                                                              A second set of bovine ESTs
Unpublished (2003)
Contact: Smith TPL
                                                                                                                                                                                                                                                                                                                           Pecora, Bovidae, Bovinae, Bos.

1 (bases 1 to 720)
Smith, T.P. L., Roberts, A.J., Echternkamp, S.E.,
Wray, J.E. and Keele, J.W.
                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Ruminantia;
                                                                                                                                                                                                                                                                                                                                                                                                                               Bos taurus
                                                                                                                  Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LysAsnSerAsnValValLysMetLeuGlnGluAsn-SerGluLeuMetAsnAsnAsnSe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    oLeuGluThrArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIl 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OGluHisLysProThrAsp--------TyrLysLysGluAsnThrGlyPr 457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAAACAGCAT-GTTGTGAAAATGCTACAGGAAAATAGGGGGAACTTATGAATAATAATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGTT-TATGAAGATATTCCTAATATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IleLysArgArgIleLeuLeuIleProLysTrpLeuTyrGluAspIleProAsnMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----CTTACTAACACGGTCTTTCTCGAAACCGTGAACTTTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          lAsnSerLeuSerAsnThrIlePheLeuGlyGluLeuSerLeuIle 552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       pSerGlyAsnAsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerVa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sLeuSerAsnAsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGTGAGCAGGT-CTATATGTTGATCCCATGATTACCGAGAT-AAAGAAATCTTCAT-CC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIlePheIlePr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTGTTATGTGGTCAATTCTTTCTTTGATGGGGATATTTAACAGATCATTCCGAACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     eProAspLeuAsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySerHi 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGAACACAAGNCTACAGATACAGAGGGGGATACGGCCCTGGGGGACAAGAGAATACCGGA--
                                                                                                                                                                                                                                                DA, ARS, US Meat Animal Research Center
Box 166, Clay Center, NE 68933-0166, U
                                                                                                                te: FQY8023 row: G column:
primer: TAGAAGGCACAGTCGAGG.
 /mol_type="mRNA"
/db_xref="taxon:9913"
/tissue_type="pooled"
/lab_host="DH10B"
                                                                                                 Location/Qualifiers
                                                               organism="Bos taurus"
                                                                                                                                                                                                                                                                                                                                                                                                                                              (cattle)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -AAATCGTATCGCAAACACACGCGTTTTTTCTGGTTCAATGGTT-----
                                                                                     . 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AACCCAATTATTTTGCGGGGGCCCGGAAATGAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            taurus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDNA
                                                                                                                                                                                                                                                                                                                 from
                                                                                                                                                                                                                                                                                                            pooled-tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3', mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mRNA
                                                                                                                                                                                                                                                  S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                              Chitko-McKown, C.G.,
                                                                                                                                                                                                                                                                                                                 normalized libraries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-MAR-2003
                                                                                                                                                                                and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     609
   RESULT 8
CD708943
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                    밁
                                                                                                             S
                                                                                                                                                문
                                                                                                                                                                        ঠ
                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                       ई
                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-667-289-2 (1-629) x CB429984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                 410
                                                                                                                                                                                                                                                                                                                                                 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            119
                                                                                                                                                   290
                                                                                                                                                                                                                  350
                                                                                                                                                                                                                                                                                                              191
                                                                                                                                                                                                                                                                                                                                                                                                              530
                                                                                                                                                                                                                                                                                                                                                                                                                                              151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        716
                                                                                    230
                                                                                                                                                                                231
                                                                                                                                                                                                                                                  211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11
     CD708943
EST25470
                                                                                                                                                                                                                                                                                                         LysTyrLeuValTrpValGlnAlaAlaAsnAlaLeuGlyMetGluGluSerLysGlnLeu
                                                                                                                                                                                                                                                                                                                                                                    GlnGlnTyrLeuThrSerSerTyrIleAsnIleSerThrAspSerLeuGlnGlyGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                  LeuThrTyrIleAspThrLysTyrValValHisValLysSerLeuGluThrGluGluGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ValThrCysVallleTyrGluTyrSerGlyAsnMetThrCysThrTrpAsnAla***Lys 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerGlyHisIleTrpValGluProAlaThrIlePheLysMetGlyMetAsnIleSerIle 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ValSerCysGluMetArgTyrLysAlaThrThrAsnGlnThrTrpAsnVal
                                                                                                                                                                                                                                       GlnIleHisLeuAspAspIleValIleProSerAlaAlaValIleSerArgAlaGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TyrCysGlnAlaAlaIleLysAsnCysGlnProArgLysLeuHisPheTyrLysAsnGly
                                                                                    GTTTCCTGTGAAATGAGATACAAAGATACAACAAACCAAACTTGGAACGTA
                                                                                                                                                  ATAAATACTACAGTGTCCAAGACTGTAATCCACTGGGATAGTCAAACATCAATTGAAAAA
                                                                                                                                                                        IleAsnAlaThrValProLysThrIleIleTyrTrpAspSerGlnThrThrIleGluLys
                                                                                                                                                                                                                CAAATTCATCTGGACGATATAGTGATACCTTCTGCATCCATTATTTCCAGGGCTGAGGAT
                                                                                                                                                                                                                                                                                 AGTATTTGGTTTGGGTCCAAGCTTCAAATGTTCTGGGCATGGAGAAGTCGAAACTA
                                                                                                                                                                                                                                                                                                                                                 CAAGAATATCTCACTTCAAGTTACATTAACATCTCCACTGATTCATTGCAAAAGGGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                              CCCACTTACATAGACACAAAGTATGTGGTGTACGTGAAGAGTTTAGAGACAGAAGAAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GluThrLeuIleCysGlyLysAspIleSerSerGlyTyrProProAspIleProAspGlu 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AsnPheLeuGluProHisAlaSerMetTyrCysThrAlaGluCysProLysHisPheGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IleLysGluArgPheGlnIleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLys 90
     human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone_lib="MARC 6BOV"
/note="Vector: pcDNA3.1; Site 1: EcoRI; Site 2: Not:
Library made with RNA pooled from multiple tIssues
including liver, lung, hypothalamus, pituitary, and
placenta/endometrium."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.64e-78
786.00
64.6%
59.9%
23.6%
602 bp
nasopharynx Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (1-720)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps:
   mRNA linear
sapiens cDNA, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -----CCACCAGATGTACTTGACAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      720
154
13
13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Site_2: NotI;
ple tīssues
      Bequence
                     BST 25-JUN-2003
                                                                                     180
```

612

612

612 70

612

291 230 351 210 411 190 471 170

231

밁 ঠ 문 **8 8 8**

멍 र् 음 성

8 8 8 8

음 성 음

Ş

```
RESULT 9
CC496590
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
ORGANISM
                                                                                                                                                 S
                                                                                                                                                                                     밁
                                                                                                                                                                                                        S
                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                        გ
                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                            S
                                                                                                                      멍
  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-667-289-2 (1-629) x CD708943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ŏ
                                                                                                                               494
                                                                                                                                                          101
                                                                                                                                                                                        434
                                                                                                                                                                                                                                               374
                                                                                                                                                                                                                                                                                                        314
                                                                                                                                                                                                                                                                                                                                                              254 TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                       194
CC496590 825 bp DNA linear GSS 17-JUN-2003
CH240_332J15.TARBAC13P2 CHORI-240 Bos taurus genomic clone
                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                  41
                                                                                                                                                                                                                   18
                                                                                                                                                                                                                                                                                                                                                                            21 CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cancer Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: YiXin Zeng
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CD708943
CD708943.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Transcriptional Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hominidae; Homo.
1 (bases 1 to 602)
Liu,X.-Q., Zhou,Y., Zhang,L.-J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Email: yxzeng@gzsums.edu.cn.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zeng, Y.-X.
                                                                                      SerGlyTyrProProAspIleProAspGluValThrCysValIleTyr
                                                                                                                                            CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                        AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                                                                                                               ProArgLysLeuHisPheTyrLysAsmGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                                                                                                                                                                                                     ATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                                                                                                                                                                                             IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
                                                                                                                                                                                                                                                                                                                                                                                                                       ATGAATCATGTCACTATTCAATGGGATGCAGTAATAGCCCCTTTACATACTCTTCAGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                 MetAsn***ValThrIleGlnTrpAspAlaValIleAlaLeuTyrIleLeuPheSerTrp
                                                                                                                             TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAAGACATTTCT
                                                                                                                                                                                        AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Yat-sen University
DongFeng Road East,
: 86-1380-9770-743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       86-20-8775-4506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       library from southern Chinese"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /tissue_type="normal nasopharynx"
/clone_lib="human nasopharynx"
/note="ESTs generated from a normal nasopharynx
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8.99e-75
756.00
99.3%
99.3%
22.7%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GI:32239573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (1-602)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GuangZhou
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Profile
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Хu,Н.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  510060, China
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chen, H.-K., Pan, Z.-G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            135
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nasopharynx
                                                                                                  136
                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and
                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                           40
                                                                                                                                                           120
                                                                                                                                                                                        493
                                                                                                                                                                                                                   100
                                                                                                                                                                                                                                               433
                                                                                                                                                                                                                                                                                                        373
                                                                                                                                                                                                                                                                                                                                                                313
                                                                                                                               553
```

```
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                  5
                                                                                              片
                                                                                                                                           S
                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
문
                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                 US-10-667-289-2 (1-629) x CC496590 (1-825)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No . :
                                                                                                                                                                                                                               434 IleThrGluIleLysGluIlePheIleProGluHisLysProThrAspTyrLysLysGlu
                                                                                                                                              454 ---AsnThrGlyProLeuGluThrArgAspTyrProGlnAsnSerLeuPheAspAsnThr 472
                                                                                                 60 AACAATACAGGATGCCTGGAGAGAAAAGAGAGCCTGGAGAAATCACTACTCACCGACCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Holt,R., Stott,J., Yang,G., Barber,S., Smailus,D., Prabhu,A.-L., Tsai,M., Cloutier,A., Lee,D., Girn,N., Olson,T., Mayo,M., Butterfield,Y., Kirkpatrick,R., Li, Guin,R., Chan,A., Chiu,R., Mathewson,C., Wye,N., Masson,A., Brown-John,M., Jones,S., Schein,J., Marra,M., de Jong,P., McWilliam,S., Barris,W., Balrymple,B.P. and Tellam,R.

Bovine BAC End Sequences from Library CHORI-240, PLATES 294 to 398 Unpublished (2003)
Other GSSs: CH240_332J15.T7
Contact: Rob Holt
                                                                                                                                                                                                  w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Email: rholt@bcgsc.ca
Clones are derived from the bovine BAC library CHORI-240
(http://www.chori.org/bacpac/bovine240.htm). For BAC library
(http://www.chori.org/bacpac/bovine240.htm). For BAC library
availability, please contact Pieter de Jong (pdejong@mail.cho.org).
Clones may be purchased from BACPAC Resources
(http://www.chori.org/bacpac/ordering_information.htm). This work
was undertaken as part of the International Bovine BAC Mapping
Consortium (IBBWC) by CSIRO Livestock Industries, Australia and the
British Columbia Genome Sciences Centre, Canada.
Plate: 332 row: J column: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequencing
The British
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CH240_332J15, genomic 8
CC496590
CC496590.1 GI:31811154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Ruminantia;
Pecora; Bovidae; Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GSS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Seq primer: SP6
Class: BAC ends.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fax: 604-877-6276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tel: 604-877-6085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The British Columbia Cancer Agency Genome Science Centre 600 W. 10th Ave, Vancouver, British Columbia, Canada V5Z
                          ThrValValTyrIleProAspLeuAsmThrGlyTyrLysProGlnIleSerAsmPheLeu
ACAGTTGTTTATATTCCTGATCTCAACACTGGGTATAAACCCCCAGATTTCAAGTTTTCTC
                                                                                                                                                                                                     (bases 1 to 825)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      taurus (cattle)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /cell_type="Blood"
/clone lib="CHORI-240"
/clone lib="CHORI-240"
/note="Vector: pTARBAC1.3; Site 1: MboI; Site 2: MboI;
/note="Vector: pTARBAC1.3; Site 1: MboI; Bovine BAC
Hereford bull L1 Domino 99375; CHORI-240 Bovine BAC
library (Male) produced by Pieter de Jong"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Bos taurus"
/mol_type="genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /db_xref="taxon:9913"
/clone="CH240_332J15"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mol_type="genomic DNA"
(strain="breed: Hereford"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . . 825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sex="Male"
                                                                                                                                                                                                                                                                                                                                                      5.69e-69
707.00
83.8%
71.6%
21.3%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                      Gaps:
                                                                                                                                                                                                                                                                                                                                                                              Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative:
     179
                                                                                                    119
                                                                                                                                                                                                     59
```

```
RESULT 10
BF212748
                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL COMMENT
                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pocus
                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 493
                                                                                                                                                                                                                    CDNA Library Preparation: CLONETECH Laboratories, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM878 row: f column: 23
High quality sequence stop: 540.
                                                                                                                                                                                                                                                                                                                                                      Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 540)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BF212748 540 bp "
601813991F1 NIH_MGC_54 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BF212748.1 GI:11106334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCACAAAATATTTTGGAAAGCCACTTCAATCGGATTTCACTCTTACAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ProGlnAsnIleLeuGluSerHisPheAsnArgIleSerLeuLeuGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GluPheValSerCysLeuGlyIleValAsnGluGluLeuProSerIleAsnThrTyrPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MetLeuLeuGluAsnAspSerProSerGluThrIleProGluGlnThrLeuLeuProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTAAATCAAGGAGAATGCAGTCCTCCGGACATGCAAAACTCAATAGAGGGGGAAACTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuAsnGlnGlyGluCysSerSerProAspIleGlnAsnSerValGluGluGluThrThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTGTCTCAAGTACAAATTCACTAAGCAACACACTATTTCTTGAAGAATTAAACCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerValSerSerValAsnSerLeuSerAsnThrIlePheLeuGlyGluLeuSerLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTGATTCCTTAAACTTGGGAAACAATGCCAGGTTTAAAAAATATCCTGATTTTGCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ValAspSerLeuAspSerGlyAsnAsnProArgLeuGlnLysHisProAsnPheAlaPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTGGGGGAAACCATCTCAGCAATGATGATGAAACAGCTTCCTCAATTCTGGAACCACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProGluGlySerHisLeuSerAsnAsnAsnGluIleThrSerLeuThrLeuLysProPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGCTTCTGGAAGATGCATTACTGAATGAAACTATTCCAGAACAACTCTGCTGCCTGAT
/clone="IMAGE:4048150"
/tlssue_type="from chronic myelogenous leukemia"
/tlssue_type="from chronic myelogenous leukemia"
/lab_host="DH10B (T1 phage-resistant)"
/clone_ilb="NHH MGC 54"
/note="Organ; bone marrow; Vector: pDNR-LIB (Clontech);
Site_1: Sfil (ggccgcctcggcc); Site_2: Sfil
(ggccattattggcc); Double-stranded cDNA was prepared from cell line RNA. 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                              organism="Homo sapiens"
|mol_type="mRNA"
                                                                                                                                                                                                            .540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cDNA clone IMAGE:4048150
                                                                                                                                                                                                                                                                                                                                                                                                                  Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                  Collection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST 06-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              629
                                                                                                                                                                                                                                                                                                   ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     479
                                               86
    RESULT 11
BF239183
LOCUS
DEFINITION
                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뫉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                    ð
                                                                                                                                문
                                                                                                                                                       S
                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                         र्
                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ŏ.
                                                                                                                                     462
                                                                                                                                                                                               403
                                                                                                                                                                                                                          478
                                                                                                                                                                                                                                                     343
                                                                                                                                                                                                                                                                                  458
                                                                                                                                                                                                                                                                                                               283
                                                                                                                                                                                                                                                                                                                                          438
                                                                                                                                                                                                                                                                                                                                                                         223
                                                                                                                                                                                                                                                                                                                                                                                                  418
                                                                                                                                                                                                                                                                                                                                                                                                                               169
                                                                                                                                                                                                                                                                                                                                                                                                                                                              398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62
```

8 8 8

밁 ક 밁 음 중 음

ફ 밁 र् 밁

```
Alto,
                             C, or G and N=A, C, G, or T). Average insert size 1.75 kb (range 0.9-4.0 kb). 15/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo
   ξ
.
```

Percent Similarity: Best Local Similarity: US-10-667-289-2 283 TyrleuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGlyLysArg 303 TyrTrp-GlnProTrpSerSerProPhePheHisLysThrProGluThrValProGlnVa BF239183 513 bp m 601905584F1 NIH_MGC_54 Homo sapiens euMetAsnAsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleL spSerGlyAsnAsnPro euGluThrArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleP ysGluIlePheIleProGluHisLysProThrAspTyrLysLysGluAsnThrGlyProL uAspīleProAsnMetLysAsnSerAsnValVal-LysMetLeuGlnGluAsnSerGluL rGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeu------TyrGl lpheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPheArgTh lThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSerIleSe TCAGCAATAATAATGAAATTACTTCCTTAACACTTTAAGACAACCAGTTTGATTCCTTAG CTGATCTCAACACTGGATATAAACCCCCAAATGTCAAATTCTCTGCT-GAGGGAAGCCATC roAspLeuAsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySerHisL |||||||||||||||||||||||||||:::|||||| TGGAGACAAGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAAGTGTATATATTC AAGAAATCT TTATGAATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAA AGGATT-AAAAGAAGGATCTTATGGTGAATACCAAAGGGGGCTTACATGAAGGATATTCCT ____AC rThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMetIleVa ACTCAGGAAATAATCCC (1-629)AGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAA--1.85e-65 673.50 64.4% 62.3% 20.2% × BF212748 538 522 (1-540)Length: Matches: Conservative: Mismatches: Indels: mRNA 540 1540 1540 1575 linear EST 14-NOV-2000 ! 398 517 461 498 402 478 342 458 282 438 222 418 168 109 382 107 362 107 107 13 521

cDNA clone IMAGE:4133421 5',

```
ACCESSION
VERSION
KEYWORDS
                                            S
                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-667-289-2 (1-629) x BF239183 (1-513)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ŏ
:
                                                                                                                                                                                                                                                                          140
                                                                                                                                                                                                                                                                                                            284 uGluProAsnIleLysTyrValPheGlnValArgCys-GlnGluThrGly-LysArgTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                     265 TrpAsn-ValLysGluPheAspThrAsnPheThrTyrValGlnGlnSerGluPheTyrLe
                                                                                                                                                                                                                                                                                                                                                                                                                   80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mRNA sequent
BF239183
BF239183.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 found through the I.M.A.G.E. Consortium/LINL at: http://image.llnl.gov plate: LICWH1034 row: g column: 22 High quality sequence stop: 502.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hominidae; Homo.

1 (bases 1 to 513)

1 (bases 1 to 513)

NH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDNA Library Preparation: CLONETECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Consortium (Clone distribution: MGC clone distribution information can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                        hrSerLysAlaPheGln-HisAspThrTrpAsnSerGlyLeuThrValAlaSerIleSer 342
                                                                                                                                                                      TrpGlnProTrp-SerSerProPhe-PheHisLysThrProGluThrValProGlnValT
                                                                                                                                                                                                                                                                                                                                                                                                                   TGGAACTGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGAATTCTACTT
CATCAAAAGCATTCCAAGCATGACACATGGAATTCTGGGCTAACAGTTGCTTCCATCTCT
                                                                                                                                                                                                                                                                          GGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCCAGAAAAACAGGCAAAAAGGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C, or G and N = A, C, G, or T). Average insert size 1.75 kb (range 0.9-4.0 kb). 15/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo Alto, CA)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /clone="IMAGE:4133421"
/tissue_type="from chronic myelogenous leukemia"
/lab_host="DH108 (T1 phage-resistant)"
/clone_lib="NIH McC 54"
/note="Organ: bone marrow; Vector: pDNR-LIB (Clontech);
Site_1: Sfil (ggccgcctcggcc); Site 2: Sfil
(ggccattatggcc); Double-stranded cDNA was prepared from cell line RNA. 5' and 3' adaptors were used in cloning follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and adaptors were considered the control of the control of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3' adaptor sequence:
5'-ATTCTAGAGGCCGAGGCGGCCGACATG-dT(30)BN-3' (where B = A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6.54e-62
642.00
92.7%
92.0%
19.3%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GI:11153104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  . 513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chordata; Craniata; Vertebrata; Euteleostomi; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        513
138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and
                                                                                                                                                                                                        323
                                                                                                                                                                                                                                                                          199
                                                                                                                                                                                                                                                                                                                                             303
                                                                                                                                                                                                                                                                                                                                                                                                                   139
                                                                                                                                 259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
```

```
Pred. Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 12
BF183992
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                         No . :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov plate: L/CM897 row: e column: 01 High quality sequence stop: 635.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: ATCC

CDNA Library Preparation: CLONETECH Laboratories, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hominidae; Homo.
1 (bases 1 to 842)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BF183992.1 GI:11062336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601843003F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4063848 5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BF183992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIleProA 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              alPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPheArgT 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATATGAAAAGAAGC 513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        snMetLysAsnSer 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ThrGlyHisLeuThrSerAspAsnArgGlyAsp--IleGlyLeuLeuLeuLeuGlyMetIleV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATTCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTCCGAA 439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACAGGGCACCTTACTTCTGACAACAGAGAGAGACCATTTGGACTTTTATTGGGAATGATCG 379
                                                                                                                                                                   /tissue_type="from chronic myelogenous leukemia"
/lab host="DH10B (T1 phage-resistant)"
/clone_lib="NIH_MGC_54"
/clone_lib="NIH_MGC_54"
/clone_lib="NIH_MGC_54"
/note="Organ: bone marrow; Vector: pDNR-LIB (Clontech);
Site_1: Sfil (ggccgctcggcc); Site_2: Sfil
(ggccattatggcc); Double-stranded cDNA was prepared from cell line RNA. 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and adaptor sequence:
5'-ATTCTAGAGGCCGAGGCGGCGACATG-dT(30)BN-3' (where B = A, C, or G and N = A, C, G, or T). Average insert size
1.75 kb (range 0.9-4.0 kb). 15/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo Alto, CA)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                clone="IMAGE:4063848"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         db xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ocation/Qualifiers
    1.45e-59
624.50
96.0%
96.0%
18.8%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             842 bp
                                                                   Length:
Matches:
                          Mismatches:
                                                 Conservative:
        Indels:
6 6 0 145
6 4 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EST 31-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     þe
                                                                                                                                                                                                                                                                                                           g as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       362
```

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 13
BF185326
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           무
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB
                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-667-289-2 (1-629)
                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 AGCAATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCA
                                                                                                                                                                                                                                                   Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                            1 (bases 1 to 430)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
Unpublished (1999)
                                                                                                                                              CDNA Library Preparation: CLONETECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov http://image.llnl.gov plate: LLCM899 row: n column: 09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601844139F1 NIH_MGC_54 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                         Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                              BF185326.1 GI:11063769
                                                                                                                                                                                                                                                                                                                                                                                                                                                              BF185326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BF185326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerHisPheAsnArgIleSerLeuLeuGluLys 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGATCGTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATAT-TTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlyIleValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerProSerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerSerProAspIleGlnAsnSerValGluGluGluThrThrMetLeuLeuGluAsnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerLeuSerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlyAsnAsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerAsnAsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATCTCAACACTGGATATAAACCCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspLeuAsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySerHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCCACTTCAATAGGATTTCACTCTTGGAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCACCCAGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATT-GTCTCCTGTTG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTTCTCCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCT-TTGGAAAATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCACTAAGCAACACAATATTTCT-GGAGAATTAAGCCTCATATTAAATCAAGGAGAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAAATAATCCCAGGTTACAAAAGCATCCTAA-TTTGCTTTTTCTGTTTTCAAGTGTGAAT
                                                                                                                    quality sequence stop: 388.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens (human)
/organism="Homo sapiens"
/mol_type="mRNA"
/db xref="taxon:9606"
/clone="IMAGE:4064840"
/tissue_type="from chronic myelogenous leukemia"
/lab host="DH108 (T1 phage-resistant)"
/clone_lib="NIH_MGC_54"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BF183992 (1-842)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cDNA clone IMAGE: 4064840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               447
                                                                                                                                                                                                                                                                                                               Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear EST 31-OCT-2000
                                                                                                                                                                                                                                                                                                               Collection (MGC)
                                                                                                                                                                                              ă
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           297
                                                                                                                                                                                                           RESULT 14
AQ699233/c
LOCUS
                                                                                                        SOURCE
ORGANISM
                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                  REFERENCE
                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                     KEYWORDS
                                                                                                                                                                                              DEFINITION
                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             80
::
```

```
/note="Organ: bone marrow; Vector: pDNR-LIB (Clontech);
Site 1: Sfil (ggccgcctcggcc); Site 2: Sfil
(ggccattatggcc); Double-stranded cDNA was prepared from
cell line RNA. 5' and 3' adaptors were used in cloning as
follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and
3' adaptor sequence:
5'-ATTCTAGAGGCCGAGCGCGACATG-dT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size
1.75 kb (range 0.9-4.0 kb). 15/15 colonies contained
inserts by FCR. This library was enriched for full-length
clones and was constructed by Clontech Laboratories (Palo
Alto, CA)."
                                                                                                                                                                                                                                            and as
```

2.7e-40 451.00 69.9% 68.5% 13.6%

Length:
Matches:
Conservative:
Mismatches:
Indels:

100 100 1

Gaps:

```
US-10-667-289-2
                                                                                               383
                                                                                                                                334
                                                                                                                                                                363
                                                                                                                                                                                                 318
                                                                                                                                                                                                                               343
                                                                                                                                                                                                                                                                258
                                                                                                                                                                                                                                                                                                 323
                                                                                                                                                                                                                                                                                                                                 198
                                                                                                                                                                                                                                                                                                                                                                 304
                                                                                                                                                                                                                                                                                                                                                                                                 138
                                                                                                                                                                                                                                                                                                                                                                                                                                  284
395
                               403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   78
                                                            YIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIleProAsnMe 403
                                                                                                                                                                                                                                                                                                                                                                                                                      uGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly-LysArgTyrT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGGAACTGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGAATTCTACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TrpAsn-ValLysGluPheAspThrAsnPheThrTyrValGlnGlnSerGluPheTyrLe
TGAAAAGACA 404
                           tLysAsnSer 406
                                                                                                                                                                                                                    rGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMetIleValPh
||||||||||
                                                                                                                                                                                                                                                                                    rSerLygalaPheGlnHigAspThrTrpAsnSerGlyLeuThrValAlaSerIleSerTh
                                                                                                                                                                                                                                                                                                                                                                                                   GGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAAAGAGGTACT
                                                                                                                                                             eAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPheArgThrGl
                                                                                                                                                                                                                                                                 ATCAAAAGCATTCCAACATGACATGGAATTCTGGGCTAACAGTTGCTTCCATCTCTAC
                                                                                                                                                                                                                                                                                                                                 GGCAGCCTTAGGAGTTCACGCGTTTTTTCATAAAACACCTGAAACAGTTCCCCAGGTCAC
                                                                                                                                                                                                                                                                                                                                                   rpGlnPro-TrpSerSer-ProPhePheHisLysThrProGluThrValProGlnValTh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (1-629)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  x BF185326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (1-430)
                                                                                                                                   န်
                                                                                                                                                                  383
                                                                                                                                   335
                                                                                                                                                                                                   333
                                                                                                                                                                                                                                    363
                                                                                                                                                                                                                                                                                                  343
                                                                                                                                                                                                                                                                                                                                     257
                                                                                                                                                                                                                                                                                                                                                                    323
                                                                                                                                                                                                                                                                                                                                                                                                     197
                                                                                                                                                                                                                                                                                                                                                                                                                                    304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     137
```

AQ699233 Sepurpose DNA linear GSS 06-JUL HS_5565_Al_H02_T7A RPCI-11 Human Male BAC Library Homo sapiens genomic_clone Plate=1141 Col=3 Row=0, genomic survey sequence.

GSS 06-JUL-1999

Hominidae, Homo.

1 (bases 1 to 569)

Mahairas,G.G., Wallace,J.G., Smith,K., Swartzell,
Mahairas,G.G., Wallace,J.G., Smith,K., Swartzell,
Keller,A., Shaker,R., Furlong,J., Young,J., Zhao,

; ;

Holzman, T., Adams, M.D.

and

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Buarchontoglires; Primates; Catarrhini;

Homo sapiens (human) AQ699233.1 GI:5389481 GSS.

```
PUBMED
COMMENT
                                                                                                                                                                                            8
                                                                                                                                                                                                                                                밁
                          S
                                                                              멍
                                                                                                                Ş
                                                                                                                                                            뫄
                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-667-289-2 (1-629) x AQ699233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   No.:
                                                                                                                                                                                                       454
                                                                                                                                                                                                                                                328
                                                                                                                                                                                                                                                                                                                                   388
                                                                                                                                                                                                                                                                                                                                                                          414
                                                                                                                                                                                                                                                                                                                                                                                                                 448
                                  494
                                                                                                                         474
                                                                                                                                                                  275
                                                                                                                                                                                                                                                                                         434
157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: jwallace@u.washington.edu
Clones are derived from the human BAC library RPCI-11. For BAC
library availability, please contact Pieter de Jong
(pieter@dejong.med.buffalo.edu). Clones may be purchased from
BACPAC Resources (http://bacpac.med.buffalo.edu/ordering_bac.htm)
or from Resear h Genetics (info@resgen.com). BAC end Web Server:
http://www.htsc.washington.edu
Plate: 1141 row: O column: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Plate: 1141 row
Seq primer: T7
Class: BAC ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         High Throughput Sequencing Center University of Washington 401 Queen Anne Avenue North, Seattle, Tel: (206) 616-3618
Fax: (206) 616-3887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        scanning the human genome Proc. Natl. Acad. Sci. U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence-tagged connectors: A sequence approach to mapping
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Mahairas GG, Wallace JC,
                       GluGlySerHisLeuSerAsnAsnAsnGluIleThrSerLeuThrLeuLysProProVal 513
                                                                                                                                                                                        AsnThrGlyProLeuGluThrArgAspTyrProGlnAsnSerLeuPheAspAsnThrThr 473
                                                                                                                                                                                                                                                                                                                                   GAAAATAGTGAACTTATGAATAATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATG
                                                                                                                                                                                                                                                                                                                                                        GluAsnSerGluLeuMetAsnAsnAsnSerSerGluGlnValLeuTyrValAspProMet 433
                                                                                                                                                                                                                                                                                                                                                                                                                   TTATCCAGTTGGTTCTTTACATGTCTTTTGCAAAATAAGATGATGTCTTTTTTTCATAG 389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ÀAATGGAGGCAGAAA-----GCAAAGTTGAAAGGAAAGCAATATTCCTATCCTCATTCGA 449
                                                                                                        ValValTyrIleProAspLeuAsnThrGlyTyrLysProGlnIleSerAsnPheLeuPro 493
                                                                                                                                                                                                                                                                                     IleThrGluIleLysGluIlePheIleProGluHisLysProThrAspTyrLysLysGlu 453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LysTrpLeuTyrGluAspIleProAsnMetLysAsnSerAsnValValLysMetLeuGln 413
GAGGGAAGCCATCTCAGCAATAATAATGAAATTACTTCCTTAACACTTAAACAACCAGAT 98
                                                                                                                                                                                                                                                ATTACAGAGATAAAAAAT---TTCATCCCAGA-CACAAGCCT---CAGACTCAAAAGGAG
                                                                                                                                                                  AATCA-GGACCCTG-GAGACAAGAGACTACCCGCAAAACTCGCTATTCGACAATACTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      quality sequence stop: 569
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone_lib="RPCI-11 Human Male BAC Library"
/notes-"Vector: pBACe3.6; Site_1: EcoRI; Site_2: EcoRI;
Male blood DNA was isolated from one rondomly chosen do
and partially digested with a combination of EcoRI and
EcoRI Methylase. Size selected DNA was cloned into the
pBACe3.6 vector at EcoRI sites"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="genomic DNA"
/db_xref="taxon:9606"
/clone="plate=1141 Col=3 Row=0"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /gex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6.33e-40
449.50
70.8%
63.2%
13.5%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (1-569)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative: Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96 (17), 9739-9744 (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 T pood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WA 98109,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    donor
                                                                              158
                                                                                                                                                                                                                                                276
                                                                                                                                                                                                                                                                                                                                   329
                                                                                                                                                                                                                                                                                                                                                                                                                                                            413
```

```
RESULT 15
AG176412
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
 맑
                          δ
                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                               US-10-667-289-2 (1-629) x AG176412 (1-651)
                                                                                                                                                                                                   Query Match:
                                                                                                                                                                                                                      Best Local Similarity:
                                                                                                                                                                                                                                         Percent Similarity:
                                                                                                                                                                                                                                                            Score:
                                                                                                                                                                                                                                                                             Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                    564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              534 ValSerSerValAsnSerLeuSerAsnThrIle 544
                                                                        25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AG176412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted (02-AUG-2001) Asao Fujiyama, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC); 1-7-22 Suehiro-chou, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:chimpbes@sgc.riken.go.jp/, URL:http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9111, Fax:81-45-503-9170)
Clones are derived from the chimpanzee BAC library RPCI-43 This BAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fujiyama,A., Hattori,M., Toyoda,A., Taylor,T.D., Totoki,Y., Watanabe,H. and Sakaki,Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Fujiyama,A., Hattori,M., Toyoda,A., Totoki,Y., Watanabe,H. and Sakaki,Y. BAC end sequences of Library RPCI-43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pan troglodytes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AG176412.1 GI:16706092
GSS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of clone tracking errors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              end was generated during the R&D process and may have higher chance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pan troglodytes DNA, clone: RP43-047K09.T7, genomic survey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AG176412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   dominidae; Pan.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LIBRARY
GlnAsnSerValGluGluGluThrThrMetLeuLeuGluAsnAspSerProSerGluThr 583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AspSerLeuAspSerGlyAsnAsnProArgLeuGlnLysHisProAsnPheAlaPheSer 533
                                                                      ATATTTCTTCGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCTCCTGACATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ### anticottagactcagganataatct-caggtacaaaggcatccgaattgtgcttnntnt 39
                                                                                               IlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSerSerProAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTTCNTTCGAAGNGTCNTCAGTCGTCAATTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 651)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            troglodytes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Vector : pBACe3.6
R.Site 1 : EcoRI
R.Site 2 : EcoRI.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequencing: T7
                                                                                                                                                                                                                                                                                                                                                 /cell_type="lymphocytes"
/clone_lib="RPCI-43 Chimpanzee Male
                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="genomic DNA"
/db_xref="taxon:9598"
/clone="RP43-047K09.T7"
                                                                                                                                                                                                                                                                                                                                                                                                                                                              organism="Pan troglodytes"
                                                                                                                                                                                                                                                                                                                                                                                           sex="male"
                                                                                                                                                                                6.31e-37
424.00
97.7%
97.7%
12.7%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (chimpanzee)
                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
                                                                                                                                                                                  Gaps:
                                                                                                                                                                                                   Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Taylor, T.D., Yada, T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Yada.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GSS 09-JAN-2002
                                                                        84
```

Search c Job time	DЪ	Ş	ф	Ş	В	ş
Search completed: October 14, 2006, 16:52:19 Job time : 7930 secs	265 ATTTCACTCTTGGAAAAG 282	624 IleSerLeuLeuGluLys 629	205 GAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTTGGAAAGCCACTTCAATAGG 264	604 GluLeuProSerIleAsnThrTyrPheProGlnAsnTleLeuGluSerHisPheAsnArg 623	145 ATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTTGGGAATCGTGAATGAG 204	584 IleProGluGlnThrLeuLeuProAspGluPheValSsrCysLeuGlyIleValAsnGlu 603

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Command line parameters:

-MODEL=frame+_p2n.model -DEV=xlh
-Q=/abss/ABSSWEB_gpool/US10667289/runat_13102006_111532_24363/app_query.fasta_1
-Q=/abss/ABSSWEB_gpool/US10667289/runat_13102006_111532_24363/app_query.fasta_1
-DB=GenEmbl -QFMT=fastap -SUFFIX=p2n.rge -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0
-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45
-DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR MIN=0 -ALICN=15 -MODE=LOCAL
-OUTFMT=pto -NORM=ext +HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000 -HOST=abs802h
-USER=US10667289 @CGN 1 16194 @runat 13102006 111532 24363 -NCPU=6 -ICPU=3
-NO_MMAP -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV_TIMEOUT=120
-WARN TIMEOUT=30 -THREADS=1 -NGAPEXT=7
-WARN TIMEOUT=30 -THREADS=1 -NGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  91:
                                                                                                                                                      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           띪
                                                                      Score
 3324
3324
3324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         seq length:
seq length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Xgapop 10.0,
Ygapop 10.0,
Fgapop 6.0,
Delop 6.0,
                                                                   Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6366136 seqs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-667-289-2
3326
                                                                                                                                                                                                                         11:
12:
13:
14:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GenEmbl:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                October 14,
                                                                                                                                                                                                                                                                                                                10:
 99.9
99.9
99.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MNXVTIQWDAVIALYILFSW.....TYFPQNILESHFNRISLLEK 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Copyright
                                                                                                                                                                                                                     gb wi: *
gb vi: *
gb ov: *
gb htg: *
gb in: *
gb om: *
gb ba: *
                                                                                                                                                                                                                                                                                                                                               gb_ro:*
gb_sts:*
gb_sy:*
                                                                                                                                                                                                                                                                                                                                                                                                  95 ph:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                   gb_env:*
                                                                   Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000000000
 2826
2859
2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2006, 14:25:09; Search time 9842 Seconds (without alignments) 6130.298 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GenCore version
(c) 1993 - 2006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Xgapext
Ygapext
Fgapext
Delext
   N N U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31973710525 residues
AF461422
CQ878371
CS110317
                                                                      Ħ
                                                                                                                         SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5.1.9
Biocceleration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12732272
 AF461422 Homo sapi
CQ878371 Sequence
CS110317 Sequence
                                                                    Description
```

0 0 0

ი ი

a

44 276 8.3 45 259 7.8	23.0	42 283 8.5		330 1 10	10.	9 442 1	8 456.5 13.	37 550 16.5	6 552 16.		4 620 18.	3 620 18.	2 659 19.	1 659 19.	0 659 19.	9 709 21.	8 1122 33.	1511 45.	6 1695 5	5 1747	4 1868 56.	3 1902 57.	2 2039	1 2175 65.	2 65.	9 2280.5 6	2284.5 68.	7 2747 82.	6 2764 83.	5 2785 8	4 2785 83.	3 2889 86.	2 2889		0 3123 93.	3292 99.	3314 9	3314 99.		314 9
2577	3 4	2014	n a	L	270	9995	276459	439	114713	•	139	000	236635	235198	219288	220412	N	1532	1784	1152	1071	1324	1155	1479	1301	1935	2488	1887	1609	1618	1618	1676	1676	1698	٦,	2123	2830	1910		1890
611	: -	: :	- 1-		ا <u>د</u>	12		2					12	12													6													
AY374496 MMU64199	1000	CR366407	2 2	200	22650	AY657029 4	AC110385	CQ745744	HSDJ763G1	AC124758	912	ເກ	AC126525	AC106222	AC111912	AC167151	L389925	BC040720	BD013241	X054991	AX467354	BC016829	AX054989	BD013242	BD013244	AX467359	AF461423	X338551	Y937255	Y937252	AY937251	AY937254	AY937253	AX467352	AY937250	BD013243	734	BD013245		AX467350
AY374496 U64199 Mu	77770	AJ011688	AD02130	N.T62193	AC12265	Continuat	AC110385	CQ745744	AL109843	AC124758	AC159129	Continuation	AC12652	22	AC11191:	AC16715		BC040720	BD013241	AX054991	AX467354	BC016829	AX054989	BD013242	BD013244	AX467359	AF461423	AX338551	AY937255	AY937252	AY937251	AY937254	AY937253	AX467352	AY937250	1324	734	1324		AX467350
Mus musculu			Called	Callua	Rattus	tion (5	5 Rattue no	Sequence	Human DNA			tion	Rattus	Rat	Rat	Bos tau	Human	Ното варі	Novel hem	Sequence	Sequence	Ното варі	Sequence	Novel hem	Novel hem	Sequence	Mus muscu						Ното варі	Sequence	Ното варі			Novel hem	4 6 4 6 6 6	Sequence

ALIGNMENTS

PUBMED REFERENCE AUTHORS REFERENCE AUTHORS LOCUS
DEFINITION
ACCESSION
VERSION SOURCE ORGANISM RESULT 1 AF461422 KEYWORDS JOURNAL TITLE 2 (bases 1 to 2826)
2 (bases 1 to 2826)
Chirica,M., Timans,J., Vaisberg,B., Travis,M.,
Pelanz,S., Zhang,R., Singh,K.P., Vega,F., To,W.,
Wagner,J., O'Farrell,A.-M., McClanahan,T., Zurawski,S., Hannum,C.,
Gorman,D., Rennick,D.M., Kastelein,R.A., de Waal Malefyt,R. and Homo sapiens interleukin-23 receptor (IL-23R) mRNA, AP461422 AF461422.1 GI:21239251 A receptor for the heterodimeric cytokine IL-23 is composed of IL-12Rbetal and a novel cytokine receptor subunit, IL-23R J. Immunol. 168 (11), 5699-5708 (2002) Wagner, J., O'Farrell, A.-P. Gorman, D., Rennick, D.M., Parham,C., Chirica,M., Timans,J., Vaisberg,E., Travis,M., Cheung,J., Pflanz,S., Zhang,R., Singh,K.P., Vega,F., To,W., Wagner,J., O'Farrell,A.-M., McClanahlan,T., Zurawski,S., Hannum,C., Gorman,D., Rennick,D.M., Kastelein,R.A., de Waal Malefyt,R. and Moore, K.W. Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Homo sapiens (human) Hominidae; Homo. 1 (bases 1 to 2826) AF461422 2826 bp mRNA linear complete cds. PRI 29-MAY-2002

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                     ş
                              밁
                                                                                      밁
                                                                                                                Ś
                                                                                                                                                                   र्
                                                                                                                                                                                                   몽
                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                               ક
                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-667-289-2 (1-629) x AF461422 (1-2826)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scores:
                            446
                                                        121
                                                                                        386
                                                                                                                   101
                                                                                                                                               326
                                                                                                                                                                                                         266
                                                                                                                                                                                                                                                                   206
                                                                                                                                                                                                                                                                                                                           146
                                                                                                                                                                            81
                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                             41
                                                                                                                                                                                                                                                                                                                                                       21
                                                                                                                                                                                                                                                                                                                                                                                    86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Moore, K.W.
Direct Submission
Submitted (19-DEC-2001) Immunology,
Ave., Palo Alto, CA 94304, USA
 AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal
                                             SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly
                                                                                      CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                              AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                                                                                       ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                                                                                                                                                                   ATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                                                                                                                                                    IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
                                                                                                                                                                                                                                                                                                                           TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                                                                                                            CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                                                                                                                                                                                                                  AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                         CCAAGGAAACTTCATTTTTATAAAAATGGCATCAAAGAAGATTTCAAATCACAAGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /codon_start=1
//product="interleukin-23 receptor"
/product="interleukin-23 receptor"
/protein_id="AAM44229.1"
/protein_id="AAM44229.1"
/db_xref="gi:21239252"
/db_xref="gi:21239252"
/db_xref="gi:21239252"
/db_xref="gi:21239252"
/db_xref="gi:21239252"
/translation="MNOVTIOWDAVIALJILFSWCHGGITNINCSGHIWVERPATIFKM
/translation="MNOVTIOWDAVIALJILFSWCHGGITNINCTWAXGKLTYLDTKYVV
HVKSLETEEGQYLTSSYINISTDSLQGGKKYLVWVQAANALGMESSKQLQIHLDDIV
IPSAAVISRAETINATVPKTIIYMDSQTTIEKVSCEMYKATTNQTWNVKEEDITNFTY
VQQSEFYLEPHIKVYFOVRCGETGKRYMQDWSSPFFHKTPETVPOVTSKAFQDTWNS
GLTVASISTGHLTSDNRGDIGLLLGMIVFAVMLSILSLIGIFNRSFRTGIKRRILLLI
PKWLYEDIFNNKNSNVVKMLQENSELMNNNSSEQYLYVDBMITEIKEIFIPEHKFTDY
KKENTGPLETRDYPQNSLFDNTTVVYIDDLNTGVKPQISNFLFRNSTSTSLILNGBECSSPDIQNS
VEESTTWLLENDSPSETIPEQTLLPDEFVSCLGIVNEELPSINTYFPQNILESHFNRI
VEESTTWLLENDSPSETIPEQTLLPDEFVSCLGIVNEELPSINTYFPQNILESHFNRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /gene="IL-23R"
86. .1975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol type="mRNA"
/db xref="taxon:9606"
/chromosome="1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              note="hemopoietic cytokine receptor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene="IL-23R"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    map="1p31.2-1p32.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
3324.00
99.7%
99.7%
99.9%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNAX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Research,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2826
627
0
2
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          California
   160
                                                           140
                                                                                                                     120
                                                                                                                                                                            100
                                                                                                                                                                                                         325
                                                                                                                                                                                                                                                                   265
                                                                                                                                                                                                                                                                                                                           205
                                                                                                                                                                                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                                                                                                                     145
                                505
                                                                                        445
                                                                                                                                                  385
                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                              60
                                                                 ঠ
                                                                                                                           S
                                                                                                                                                                                     S
                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                      र्
                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                     र्ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    吊
               δ
                                            밁
                                                                                                    밁
                                                                                                                                                      멍
                                                                                                       1466
                                                                                                                                                              1406
                                                                                                                                                                                                                        1346
                                                                                                                                                                                                                                                                                                                                          1226
                                                                                                                                                                                                                                                                                                                                                                                                   1166
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1046
                                                                                                                                                                                                                                                                                 1286
                                                                         481
                                                                                                                                   461
                                                                                                                                                                                           441
                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                             401
                                                                                                                                                                                                                                                                                                                                                                      381
                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          161
                501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValIlePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ANCATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
AsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSerGlyAsn
                                                                AsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySerHisLeuSerAsn
                                                                                                                      ArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAspLeu
                                                                                                                                                                                  PheIleProGluHisLysProThrAspTyrLysGluAsnThrGlyProLeuGluThr 460
                                                                                                                                                                                                                                                                                 CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT 1345
                                                                                                                                                                                                                                                                                                   ProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsn 420
                                                                                                                                                                                                                                                                                                                                                             ArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                                                                                                                                                                 ATCGTCTTTGCTGTTATGTTGCTATTCTTTGATTGGGATATTTAACAGATCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                       IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                             AACACTGGATATAAACCCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAAT
                                                                                                       TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGAAGAATACAGGACCCCTGGAGACA
                                                                                                                                                                                                                        AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                         AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle
                                                                                                                                                                                                                                                                                                                                          CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACADACCADACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TATTOGGATAGTCAAACAACTTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCATTACAAGGTGGCAAGAAGTACTTGGGTTTGGGTCCAAGCAGCAAAC
```

320

300

985

925 280 865 805

240 745 220 685 200

260

1045

1225

380

400

1285

1165

360

1105

1465

1525 480 1405 440

1585

500

	6	RESULT 2 CQ878371 CQ878371 CQ878371 CQ878371 CQ878371 VERSION CQ878371 VERSION CQ878371.1 GI:53790924 SOURCE ORGANISM Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Hominidae; Homo. REFERENCE R	Db 1826 AGTCAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC 1885 Qy 601 ValasmGluGluLeuProSerIleAsmThrTyrPheProGlnAsmIleLeuGluSerHis 620	Db 1586 AATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT 1645 Qy 521 AsnProArgLeuGlnLysHisProAsnPheAlaPheSerValAsnSerLeu 540
Qy 221 SerAlaNaValIleSerArgAlaCluThrIleAsnAlaThrValProLysfhrIleIle 240 Db 779 TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCATAATT 838 Qy 241 TyrTrpAspSerGlnThrThrIleGluLysValSerIgGluMetArgTyrLysAlaThr 260 B39 TATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTAACA 898 Qy 261 ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnSer 280 B99 ACAAACCAAACTTGAAACAATTGAAAAGGTTTACATATGTGCAACAGGCTACA 898 Qy 261 ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnSer 280 B99 ACAAACCAAACTTGGAATGTTAAAGAATTTGACACAATTTTACATATGTGCAACAGTCA 958 Qy 281 GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly 300 959 GAATTCTACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA 958 Qy 301 LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValArgC 1018 pho 1019 AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTCATAAAACCTGGAAACAGTTCCC 1078 321 GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer 340 321 GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer 340 1079 CAGGTCACATCAAAAGCATTCCAACATGAACACTGGAATTCTGGGCTAACAGTTGCCTTCC 1138		Oy 101 CysThralaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer 120	Db 239 ATTTTTAAGATGGGTATGAATATCTCTATATTTGCCAAGCAACTAGAACTGCCAA 298 CD CD CD CD CD CD CD C	milarity: 100.0% Mismatches: 0 99.9% Indels: 0 2 (1-629) x CQ878371 (1-2859) Metasn***ValThrIleGlnTrpAspAlaValIleAlaLeuTyrIleLeuPheSerTrp

```
SOURCE
ORGANISM
                                                                 DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                        RESULT 3
CS110317
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                   र्
                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                 닭
                                                                                                                                                                                                                                                                                                            중 유
                                                                                                                                                                                                                                                                                                                                                                   र्
                                                                                                                                                                                                                                                                                                                                                                                               음 성 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            হ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 名 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                문
                                                                                                                                                                                                                                    В
                                                                                                                                                                                1979
                                                                                                                                                                                                                                      1919
                                                                                                                                                                                                                                                                                                                                                 1799
                                                                                                                                                                                                                                                                                                                                                                                                        1739
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1139
                                                                                                                                                                                                                                                                                            1859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               441
                                                                                                                                                                                                          621
                                                                                                                                                                                                                                                                                                                                                                            561
                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            341
           Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                       Homo sapiens (human)
                                                                               Sequence 1 from CS110317 GI:
                                                                                                                        CS110317
Hominidae; Homo
                                                                                                                                                                             PheasmargileSerLeuGeuGluLys 629
                                                                                                                                                                                                                                    ValasnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                                                                                                                                                                                                                                                       SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                                                                                                                                                                                                                                                                 SerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSerGlyAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATTATTTCCTGATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PheIleProGluHisLysProThrAspTyrLysLysGluAsnThrGlyProLeuGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ArgThrGlyIleLy8ArgArgIleLeuLeuLeuIleProLy8TrpLeuTyrGluA8pIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet
                                                                                                                                                                                                                                                                                                                                                                                                        AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGTGTGAATTCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT
                                                                                  GI:68148524
                                                                                                           2859 bp DNA Patent WO2005052157.
                                                                                                                         linear
                                                                                                                         PAT
                                                                                                                         22-JUN-2005
                                                                                                                                                                                                                                      1978
                                                                                                                                                                                                                                                                                                                                                                                                        1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1198
                                                                                                                                                                                                                                                                 620
                                                                                                                                                                                                                                                                                            1918
                                                                                                                                                                                                                                                                                                                       600
                                                                                                                                                                                                                                                                                                                                                  1858
                                                                                                                                                                                                                                                                                                                                                                                                                                   560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                            580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
JOURNAL
                                    श्च
                                                               밁
                                                                                           Ś
                                                                                                                        밁
                                                                                                                                            S
                                                                                                                                                                             밁
                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                      닭
                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
DB:
              문
                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-667-289-2 (1-629) x CS110317 (1-2859)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
0
::
                                                                  479
                                                                                              121
                                                                                                                         419
                                                                                                                                                                               359
                                                                                                                                                                                                                                                                                                                                                  179
                                       141
                                                                                                                                                   101
                                                                                                                                                                                                                                      299
                                                                                                                                                                                                                                                                                            239
                                                                                                                                                                                                                                                                                                                                                                                                        119 ATGAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG
                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                     1 MetAsn***ValThrileGlnTrpAspAlaValIleAlaLeuTyrIleLeuPheSerTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chirica,M., Kastelein,R.A., Moore,K.W. and Parham, I1-23 and its receptor; related reagents and metho Patent: WO 2005052157-A 1 09-JUN-2005; Schering Corporation (US)
                                                                                                                                                                                                                                                                                                                                                                CysHisGlyGlyIleThrAsmIleAsmCysSerGlyHisIleTrpValGluProAlaThr 40
                                                                                                                                                                                                                                                                                           AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal 160
                                                                                   SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly
                                                                                                                                         CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAapIlaSer
                                                                                                                                                                               ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                   TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                          TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                      TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
              AACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /Translation="mixtiqwdavialyileswchggitnincsghiwvepatifkm
ganisiycqaaikuccorkileykugikerfqitrinttarwaxikeleehasnycy
accephipgetlickoliskgeped iddevryilesganatchwaxikiydotkyvy
hyksleteeggyltssyinistdslogdkylwwoqaanalmeeskolqihlddiv
lesaayisraetinatypkriiywdsQttiskyschwaykatingtwakefdyntwry
voqsefylephikyvpcyrcoetgkrywopaspetkyptypyteskaffebhenkis
sletyasistghiikyvpcyrcoetgkrywopassefehkpetypyteskaffebhenkiellli
skwlybdiphikyvpcykroetgkrykoptypphiteikeifebhentitli
kkepydslognwerlokhentevyipbhiteilebeskeshentifleshenkistoly
kkentgeletrdypowishersvssynslatiflogelslilucgscsspoions
sbettymletroppowishersvssynslatiflogelslilucgspoions
sbettymletroppowishersvssynslatiflogelslilucgscsspoions
sbettymletroppowishersvssynslatiflogelslilucgscsspoions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
119. .2008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /codon_start=1
/protein_id="CAJ09921.1"
/db_xref="GI:68148525"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     note="unnamed protein product"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  'product="unnamed"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LTEK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
3324.00
100.0%
100.0%
99.9%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels:
Gaps:
```

178

298 60

80

418 100 358

865

중 음 성

당

```
1439
                                                                                                                                                                                                                                            1319
                                                                                                                                                                                                                                                                                                                                  1199
                                                                                                                                                                                                                                                                                                                                                                             1139
                                                                                                                                                                                                                                                                                                                                                                                                                        1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1019
                                                                                                                                                                                                                                                                                       1259
                                                                                                                                                                                                                                                                401
                                                                                                                                                                                                                                                                                                                                                       361
                                                                                      481
                                                                                                                                                                                                                                                                                                           381
                                                                                                                                                                                                                                                                                                                                                                                                 341
                                                                                                                                                                                                                                                                                                                                                                                                                                            321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   839
 521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                599
                                                                             AsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySerHisLeuSerAsn
                                                                                                          PheIleProGluHisLysProThrAspTyrLysLysGluAsnThrGlyProLeuGluThr
                                                                                                                                                                                                           AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle
                                                                                                                                                                                                                                         ArgThrGlyIleLysArgArgIleLeuLeuIleProLysTrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                                                                                                 IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                                        IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet
                                                                                                                                                                                                                                                                                                                                                                                                                        CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                   GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AlaLeuGlyMetGluGluSerLy8GlnLeuGlnIleHisLeuAspAspIleValIlePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HisVallysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
AsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSerLeu
                                   AsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSerGlyAsn
                                                                                                                                                      TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACA
                                                                                                                                                                                                                                                                                                                                                                              ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCC
                      1678
                                                                  1618
                                                                                                                                                     1498
                                                                                                                                                                                                                                                                                                                                                                                                                        1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1018
                                                                                      500
                                                                                                           1558
                                                                                                                                480
                                                                                                                                                                           460
                                                                                                                                                                                                1438
                                                                                                                                                                                                                     440
                                                                                                                                                                                                                                                                                       1318
                                                                                                                                                                                                                                                                                                             400
                                                                                                                                                                                                                                                                                                                                  1258
                                                                                                                                                                                                                                                                                                                                                                              1198
                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                            1378
                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                       380
                                                                                                                                                                                                                                                                                                                                                                                                                                              340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
              Ś
                                          밁
                                                         5
                                                                                                    8
                                                                                                                               밁
                                                                                                                                             ð
                                                                                                                                                                        밁
                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
  맑
                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                                                                        Score:
```

중 유

5

밁

뫄

음 성

음 성

음 성

음 성

\$ B

중 음 중 음

 정 음 용 음

8

음 성 음

```
RESULT 4
AR561607
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                   US-10-667-289-2 (1-629) x AR561607
                                                                                                                                                                                                                                                                Alignment
                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                       No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1859
                                                                                                                                                581
                                                                                                             179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
359
                                    299
                                                                        239
                81
                                                                                         41
                                                     61
                                                                                                                              21
                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
AR561607
AR561607.
                                                                                                                                                                                                                                                                                                            1 (bases 1 to 2859)
Chirica,M., Kastelein,R.A., Moore,K.W.
IL-23 receptor binding compositions
Patent: US 6756481-A 1 29-JUN-2004;
Schering Corporation; Kenilworth, NJ
Location/Qualifiers
1. 2859
                                                                                                                                                                                                                                                                                                                                                                           Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                            AR561607
ASDLYSTHTTHEALAACGLEUTEPTYELYSASDPHELEUGLUPTOHISALASEEMEETYE
                                                                                                           PheAsnArgIleSerLeuLeuGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                    ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                  IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                    μ
                                                                                                                                                                                                                                                                                          organism="unknown"
/mol_type="genomic
                                                                                                                                                                                                        0
3324.00
100.0%
100.0%
99.9%
                                                                                                                                                                                                                                                                                                                                                                                                                                     from
                                                                                                                                                                                                                                                                                                                                                                                                                                   2859 bp
patent US 6756481.
                                                                                                                                                                                    (1-2859)
                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                       Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2005
                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                           and
                                                                                                                                                                                                       2859
629
0
                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                             08-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1738
 418
                  100
                                     358
                                                        80
                                                                         298
                                                                                           60
                                                                                                            238
                                                                                                                               40
                                                                                                                                                  178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        560
                                                                                                                                                                    20
```

유 성 밁 S 문 ક 밁 ક 문 δ 밁 ક 문 S 밁 ð 밁

중 유

ર્ક

음 중

```
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                            AX338549
LOCUS
DEFINITION
ACCESSION
VERSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            음 성 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5 B 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                         Sg
                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            461
                                                                                                                                                                                                                                                                                                                                                                                                                               unidentified unidentified unclassified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX338549 2859 bp
Sequence 1 from Patent W00185790.
AX338549
AX338549.1 GI:18128949
                                                                                                                                                                                                                                                                                                                                                   Chirica,M., Kastelein,R.A., Moore,K.W. and Parham,C.L. Mammalian receptor proteins; related reagents and methods Patent: WO 018599.A 1 15-NOV-2001; SCHERING CORPORATION (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerABnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSerSer 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PheAsnArglleSerLeuLeuGluLys 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProAspIleGlnAsnSerValGluGluThrThrMetLeuLeuGluAsnAspSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSerLeu 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSerGlyAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTCAATAGGATTTCACTCTTGGAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCC
/protein id="Gad20540.1"
/protein id="Gad20540.1"
/db xref="GI:18128950"
/translation="maxvtiqwdavialyilfswchggitnincsghiwvepatifkm
/translation="maxvtiqwdavialyilfswchggitnincsghiwvepatifkm
/translation="maxvtiqwdavialyilfswchggitninchyvy
gmnistycqaaikncoprklhfykngiksfeqitriyxysgommtctwqakkltyidtkyv
ascekhfqetlicgkdissgepedidevervyvyqaaaalgmeeskolqihlddiv
HvksilfteseqqyltssyinistdslogkkylvwvQaaaalgmeeskolqihlddiv
HyksilfteseqqyltssyinistdsqcgkkylvwvQaaaalgmeeskolqihlddiv
198aavistaatinatypkriiywbgottiekksfephtxstattoptwry
vqqsefylepnikyvfqvrcqetgkkrywqpwsspffkktpetvpqvtskafqhdtwns
ggltyasistghtisdkrgdiglllgmivpaymlsilsliginensfrgitriili
pkmlyedipnmkskuvvkmlgenselmnusseqvlyvdpmiteiksifflenekfpty
kkentgelefntopypqssffdhttvyfpdlintgkkpqishflesghlsnnueitslt
lkppvdsldsgnnprlokhpnfafsvssvnslsntiflgelslilnogecsspdiqns
                                                                                                                                                                                                      /organism="unidentified"
/mol_type="unassigned_DNA"
/db_xref="taxon:32644"
/note="primate; surmised Homo sapiens"
119. 2008
/note="unnamed protein product; Xaa translations depend
genetic code"
                                                                                                                                                                                           /codon_start=1
                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                 sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 09-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                          9
```

Qy 221 SerAlaAlaVallleSerArgAlaGluThrIleAbnAlaThrValProLysThrIleIle 240	Qy 181 IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn 200	Qy 141 AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal 160	Db 419 TGCACTGCTGAATGTCCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT 478 Qy 121 SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly 140	Qy 81 AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr 100	61 ProhrgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle	Db 179 TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA 238 Qy 41 IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln 60	119 ATGAATCAKGTCACTATTCAATGGGAATGAGTAATAGCCCTTTACATACTCATCAGCTGG 17 21 CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr 40	-10-667-289-2 (1-629) x AX338549 (1-2859) 1 MetAsn***ValThrileGlnTrpAspAlaValIleAlaLeuTyrileLeuPheSerTrp 20	100.0% Mismatches 99.9% Indels: 2 Gaps:	Length: Matches: Conservative:	mat_peptide 188. 2005 /product="unnamed" ORIGIN	VEEETI
Db 1859 AGTGAAACTATTCCAGAACAGACCCTGCTTCTGATGAATTTTGTCTCCTGTTTGGGGATC 1918 Qy 601 ValasmGluGluLeuProSerIleAsmThrTyrPheProGlnAsmIleLeuGluSerHis 620	541 1739 561 1799		Qy 481 ASMATCHCCGCAAAACCCGCAAATTCTACACTGTIGTATATATCCTGATCTC 1330 Qy 481 ASMTATGTYTYLYSPTOGINTIESETASNPheLeuProGluGlySerHisLeuSerAsn 500	1439 TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACA 461 ArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAspLeu	421 1379	Qy 401 ProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsn 420 	Qy 381 ArgThrGlyIleLy8ArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIle 400	361 IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAgnArgSerPhe 	341 IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuGlyMet 	321 GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer 	Qy 301 LysargTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro 320	Db 959 GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC 1018

AUTHORS AUTHORS FEATURES SOURCE: PECCENT Si Best Local Query Matc Db	LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE
TITIES Command, D.J., Medicy, B.A., Bitd, T.A., Dubose, R.F. and Wiley, S.R. TITIES Patentic Wood 2006(6-A. 20 11.APR-2002); JOURNAL Patentic WO 02206(6-A. 20 11.APR-2002); FRATURES Location/Qualifiers Loc	AX467350 1890 bp DNA linear PAT 16-JUL-2002 Sequence 20 from Patent WC00229060. AX467350 AX467350.1 GI:21900587 Homo sapiens (human) Homo sapiens Eukaryota; Metazoa; Chordata; Craniata, Vertebrata; Buteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae; Homo.
6	04 04 05 05 05 05 05 05 05 05 05 05 05 05 05
261 ThreenGinThrTphenVallyeilpheaepthrAepbeThrTyTVeiGliGliGlnGer 280 281 GlubeFyrLeuglibraepthrAepbeThrAepbeThrTyTVeiGliGliGlnGer 280 281 GlubeFyrLeuglibraepthrAepbeThrAepbeThrAepbeThrAepbeThrGy 300 281 GlubeFyrLeuglibraepheThrAepbeThrAepbeHeilyeThrAepbeThrGy 300 281 GlubeFyrLeuglibraepheThrAepbeThrAepbeHeilyeThrAepbeThrGy 300 301 LysartyTyTpplibraeThrSerTypSerSer ProPheabheHeilyeThrAepb	601 GCACTAGGCATGAAAGAGTCAAAACAACTGCAAAATTCACCTGGATGATATAGTGATAACCT 660 221 SerAlaAlaVallleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle 240

•

G67-289-2 (1-629) x BD013245 (1-1910) 1 Methsn*ValThrIleGlnTrpAsphlaVallleAlaL	ORIGIN Alignment Scores: Pred. No.: Score: Score: Percent Similarity: 99.5% Best Local Similarity: 99.5% Ouery Match: DB: Conservative: 0 Ouery Match: Ouery Ma		PER 27-SEP-1999 JP 99P 273358,03-AUG-2000 JP 00P 240397 PI MASATSUGU MASATSUGU MASATSUGU TOMMENT OS Homo sapiens (human) PN WO 0123556-A/5 PD 05-APR-2001 PF 27-SEP-2000 WO 2000JP006654 PF 27-SEP-1999 JP 99P 273358,03-AUG-2000 JP 00P 240397 PI MASATSUGU MAEDA,NORIKO YAGUCH PR C13N15/12 C13N15/12 C07814/715 C07816/28 C13N21/02 BC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eu Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eu Mammalia; Eutheria; Euarchontoglires; Primates; Catarr Hominidae; Homo. 1 (bases 1 to 1910) 1 (bases 1 to 1910) Maeda, M. and Yaguchi, N. Novel hemopoietin receptor protein, NR12 Patent: WO 0123556. \$ 05-APR-2001; CHICAL BESTRECH THE EDA MATERIA BESTRECH THE	RESULT 7 BD013245 LOCUS DEFINITION Novel hemopoletin receptor protein, NR12. ACCESSION BD013245 VERSION BD013245 1 GI:22093434 KEYWORDS WO 0123556-A/5. SOURCE Homo sepiens (human)	Db 1681 CCTGACATACAAAACTCAGTAGAGGAGGAGAACCACCATGCTTTTGGAAAATGATTCACCC 1740 Qy 581 SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle 600
5	& B & B &	p	D	B & B &	D	B & B & B & B
1021 ArcTcThchadgdchAcCTThCTdAChAchadadadadadalcTTdaTrdGdAchadadadadadadadadalcTTdaTrdGdAchadaddadadadadadadadadadadadadadadadada	301 LysargTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro 320	261 ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer 280	221 SerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle 240	181 IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn 200	141 ABRMETTHTCYSTHTTTPABRALA***LYBLEUTHTTYTILEABPTHTLYBTYTValVal 160	

```
Pred. No.:
Score:
Percent Similarity:
Best Local Similarity:
Query Match:
,DB:
                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                  RESULT 8
AX467349
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                     8 8 8 8 8 8 8 8 8 8 8 8
                                                                                                                                                                                                                                                                                                                                       8 8 8 8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                             밁
                                                                        FEATURES
Bource
                                                                                                                                                                                                                                                                                            1621
                                                                                                                                                                                                                                                                                                                   1561
                                                                                                                                                                                                                                                                                                                                                                  1441
                                                                                                                                                                                              1861
                                                                                                                                                                                                                                                                    1681
                                                                                                                                                                                                                                                                                                                                           1501
                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                      461
                                                                                                                                                                                                         621
                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                        581
                                                                                                                                                    AX467349
Sequence 19
AX467349
AX467349.1
                                                                                  Cosman, D.J., Mosley, B.A., Bird, T.A., I
Hematopoietin receptors hpr1 and hpr2
Patent: WO 0229060-A 19 11-APR-2002;
Immunex CorporatioN (US)
                                                                                                                     Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                  Homo
                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                    PheAsnArgIleSerLeuLeuGluLys
                                                                                                                                                                                                                     ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                                                                                                                                                                                            SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                                                                                                                                                                                                           AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                  sapiens
                                                                                                                                                                19
                                                   /organism="Homo sapiens"
/mol_type="unassigned DNi
/db_xref="taxon:9606"
                                                                        1. .2830
                                                                           Location/Qualifiers
                                                                                                                 Homo.
 0
3314.00
99.5%
99.5%
99.6%
                                                                                                                                                                from
                                                                                                                                                    GI:21900586
                                                                                                                                                                Patent
                                                                                                                                                                2830 bp
WO0229060.
     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                             1887
                                                                                                                                                                                                         629
                                                           DNA"
                                                                                                                                                                      DNA
2830
626
0
                                                                                                                                                                       linear
                                                                                                     and
                                                                                                                                                                       PAT
                                                                                                                                                                       17-JUL-2002
                                                                                                                                                                                                                      1860
                                                                                                                                                                                                                                             1800
                                                                                                                                                                                                                                                                     1740
                                                                                                                                                                                                                                                                                580
                                                                                                                                                                                                                                                                                            1680
                                                                                                                                                                                                                                                                                                                    1620
                                                                                                                                                                                                                                                                                                                                                                                           1440
                                                                                                                                                                                                                                 620
                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                           1560
                                                                                                                                                                                                                                                                                                                                                                   1500
                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                        560
                  유 &
                                      8 8 8 8
                                                                                       음 성 음
                                                                                                                        Ş
                                                                                                                                        밁
                                                                                                                                                ક
                                                                                                                                                            g
                                                                                                                                                                        S
                                                                                                                                                                                   음 중
                                                                                                                                                                                                           음 성 음 성
                                                                                                                                                                                                                                                              음 성 음
                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                              $
                                                                                                                                                                                                                                                                                                                                                             음 성
                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-667-289-2 (1-629)
                                         1007
                                                                           281
                                                                                                               827
                                                                                                                            241
                                                                                                                                                                                                                                       527
                                                                                                                                                                                                                                                              467
                                                                                                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                                                             347
                             321
                                                                 947
                                                                                         887
                                                                                                    261
                                                                                                                                        767
                                                                                                                                                    221
                                                                                                                                                                707
                                                                                                                                                                           201
                                                                                                                                                                                        647
                                                                                                                                                                                                               587
                                                                                                                                                                                                                          161
                                                                                                                                                                                                                                                  141
                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                      407
                                                                                                                                                                                                                                                                                                                                     287
                                                                                                                                                                                                                                                                                                                                                             227
                                                                                                                                                                                                                                                                                                                                                                                     167
                                                                                                                                                                                                                                                                                                                                                                                                             107
                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                         4
                                                                                                                                                                                                                                                                                                                                                                                                21
                                                                                                                                                                                                                                                                                                                                                                                                                        ببر
                                                                                                                                                                                                               CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                            GlupheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly
                                                                                                               TyrTrpAspSerGlnThrThr1leGluLysValSerCysGluMetArgTyrLysAlsThr
                                                                                                                                                               AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValllePro
                                                                                                                                                                                      ASDLYSTATTATALAATGLEUTTTTYTLYSASDPHOLEUGlUPTOHISALASGTMOTTYT
                                                                                                                                                                                                                                                                                                                                                            IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet
                                         LysargTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                         ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                        CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                                                                                                                                                     ProarglysleuhisPheTyrlysasnGlyIlelysGluargPheGlnIleThrargIle
                                                                                                                                                                                                                                                                                       TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                    x AX467349
                                                                                                                                                                                                                                                                                                                                                                                                                                    (1-2830)
                                                                                                                                                                                                                                                   160
                                                                              300
                                           1066
                                                      320
                                                                   1006
                                                                                           946
                                                                                                                                                                                                                                        586
                                                                                                                                                                                                                                                                           140
                                                                                                                                                                                                                                                                                                                                                              286
                               340
                                                                                                     280
                                                                                                                 988
                                                                                                                             260
                                                                                                                                         826
                                                                                                                                                     240
                                                                                                                                                                 766
                                                                                                                                                                            220
                                                                                                                                                                                         706
                                                                                                                                                                                                    200
                                                                                                                                                                                                                646
                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                526
                                                                                                                                                                                                                                                                                       466
                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                               406
                                                                                                                                                                                                                                                                                                                          100
                                                                                                                                                                                                                                                                                                                                      346
                                                                                                                                                                                                                                                                                                                                                  80
                                                                                                                                                                                                                                                                                                                                                                                     226
                                                                                                                                                                                                                                                                                                                                                                                                 40
```

```
REFERENCE
AUTHORS
TITLE
                                                           KEYWORDS
SOURCE
ORGANISM
                                                                                        DEFINITION
ACCESSION
VERSION
                                                                                                                      RESULT 9
BD013243
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                              ঠ
                                                                                                                                                                                                     문
                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                        뫄
                                                                                                                                                                                                                                                              성 음
                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                           중 유
                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                              망
                                                                                                                                                                                                                                                                                                                                                                                                                             ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                문
                                                                                                                                                                 1967
                                                                                                                                                                                                                                                1847
                                                                                                                                                                                                                                                                                                                                1727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1187
                                                                                                                                                                                                       1907
                                                                                                                                                                                                                                                                                                                                                                        1667
                                                                                                                                                                                                                                                                                                                                                                                                                1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    461
                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                           561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    381
1 (bases 1 to 2123)
Maeda,M. and Yaguchi,N.
Novel hemopoietin receptor protein,
                                      Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                        Homo sapiens (human)
                                                                               Novel hemopoietin recept
BD013243
BD013243.1 GI:22093432
WO 0123556-A/3.
                              Hominidae; Homo.
                                                                                                                                                                TTCAATAGGATTTCACTCTTGGAAAAG 1993
                                                                                                                                                                           PheAsnArgIleSerLeuLeuGluLys 629
                                                                                                                                                                                                       GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCAC
                                                                                                                                                                                                                   ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                                                                                                                                                                                              SerGluThrIleProGluGlnThrLeuLeuProAgpGluPheValSerCysLeuGlyIle
                                                                                                                                                                                                                                                                                      AsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSerGlyAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySerHisLeuSerAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGAAGAATACAGGACCCCTGGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PheIleProGluHisLysProThrAspTyrLysLysGluAsnThrGlyProLeuGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ArgThrGlyIleLysArgArgIleLeuLeuIleProLysTrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                       AACACTGGATATAAACCCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                             hemopoietin receptor
                                                                                                                       2123
                                                                                                           23 bp I
                                                                                                                       DNA
                                                                                                              NR12.
  NR12
                                                                                                                        linear
                                                                                                                        PAT
                                                                                                                        02-AUG-2002
                                                                                                                                                                                                        1966
                                                                                                                                                                                                                                               1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1426
                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                        1846
                                                                                                                                                                                                                                                                                                            580
                                                                                                                                                                                                                                                                                                                                1786
                                                                                                                                                                                                                                                                                                                                                                         1726
                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                1666
                                                                                                                                                                                                                                                                                                                                                                                                                                    520
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1246
                                                                                                                                                                                                                            620
                                                                                                                                                                                                                                                                                                                                                   560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment :
Pred. No.:
         δ
                             밁
                                             S
                                                                     밁
                                                                                   Ş
                                                                                                             片
                                                                                                                               S
                                                                                                                                                                   5
                                                                                                                                                                                             片
                                                                                                                                                                                                              S
                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                     ठ
                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bource
                                                                      578
                                                                                                              518
                                                                                                                                                     458
                                                                                                                                                                                             398
                                                                                                                                                                                                                                    338
           201
                                                  181
                                                                                        161
                                                                                                                                 141
                                                                                                                                                                       121
                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                              278
                                                                                                                                                                                                                                                                                                                    218
                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                         41
                                                                                                                                                                                                                                                                                                                                                                                 21
                                                                                                                                                                                                                                                                                                                                                                                                       98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEE
AlaLeuGlyMetGluGluSerLy8GlnLeuGlnIleHi8LeuA8pA8pI1eVall1ePro
                                          IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                    HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                                         SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly
                              ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAAC
                                                                      CATGTGAAGAGTTTAGAGACAGAAGAAGAAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                      TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDS
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-667-289-2 (1-629)
                                                                                                                                                                                                                                                                          158 TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                                                                                                            Patent: WO 0123556-A 3 05-APR-2001;
CHUGAI RESEARCH INSTITUTE FOR MOLECULAR MEDICINE INC, ASATSUGU MAEDA, NORIKO YAGUCHI
OS Homo sapiens (human)
PN WO 0123556-A/3
PD 05-APR-2001
PF 27-SEP-2000 WO 2000JP006654
PR 27-SEP-2000 WO 2000JP006654
PR 27-SEP-1999 JP 99P 273358,03-AUG-2000 JP 00P 240397 PI MASATSUGU MAEDA,NORIKO YAGUCHI
PC C12N15/12,C12N1/21,C12N5/10,C07K14/715,C07K16/28,C12P21/02,
                CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                    AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                         ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                                                                                                      ATTTTTAAGATGGGTGTGAATATCTCTATATATTGCCCAAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                                                                                             IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
                                                                                                                                                                                                                                                                                            CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                G01N33/567
TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                  AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                      Location/Qualifiers (98). .(1984).
Location/Qualifiers
1. .2123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
3292.00
99.2%
98.9%
99.0%
                                                                                                                                                                                                                                                                                                                                                                                                              x BD013243 (1-2123)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                2123
622
2
5
0
457
                                 120
                                                                  397
                                                                                                    100
                                                                                                                                      337
                                                                                                                                                                        80
                                                                                                                                                                                                          277
                                                                                                                                                                                                                                          60
                                                                                                                                                                                                                                                                          217
                                                                                                                                                                                                                                                                                                              40
                                                                                                                                                                                                                                                                                                                                                157
                                                                                                                                                                                                                                                                                                                                                                                  20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2
```

```
1478
                                                                                                                                                                                                                                                                                                                                                                                                 1418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1058
                                                                  1718
                                                                                                                                 1658
                                                                                                                                                                                                  1598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1118
                                                                                                                                                                                                                                                               1538
                                561
                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                              461
                                                                                                                                                                                                                                                                                                                                                                                                                             441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         758
AsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSerLeu
                                                                                                                                                                                                                   AsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSerGlyAsn
                                                                                                                                                                                                                                                                                     AsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySerHisLeuSerAsn
                                                                                                                                                                                                                                                                                                                              PheIleProGluHisLysProThrAspTyrLysLysGluAsnThrGlyProLeuGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCGTCTTTGCTGTTATGTTGAATTCTTTCTTTGATTGGGACATTTAACAGATCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LyshrgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerAlaAlaValIleSerArgAlaGluThrIleA8nAlaThrValProLysThrIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCACTAGGCATGGAAGAGTCAAAACAACTGCAAAATTCACCTGGATGATATAGTGATACTT
                                                                                                                                 AATCCCAGGITTACAAAAGCATCCTAATTTTTGCTTTTTCTGTTTTCAAGTGTGAATTCACTA
                                                                                                                                                                                                  AATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT
                                                                                                                                                                                                                                                                 AACACTGGATATAAACCCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGTAAT
                                                                                                                                                                                                                                                                                                                                                                                               TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACAAACCAAACTTGGAATGTTAAAGAATTTGACAACTATTTACATATGTGCAACAGTCA
                                                                                                                                 1717
                                                                                                                                                                                                  1657
                                                                                                                                                                                                                                                                                                                                                                                                 1477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1057
                                                                1777
                                                                                                                                                                                                                                                                 1597
                                                                                                                                                                                                                                                                                                                                1537
                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                               460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         817
                                580
                                                                                                 560
                                                                                                                                                                 540
                                                                                                                                                                                                                                  520
                                                                                                                                                                                                                                                                                                 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          757
```

밁 ક 밁

Ş 밁 8

문

중 유

ર્શ 당 S B र्

8 8

ક 문 중 음

밁

8 8 8

र् 밁 중 유

1837

Percent Similarity:
Best Local Similarity:
Query Match:
DB:

0 3123.00 99.8% 99.8% 93.9%

Length:
Matches:
Conservative:
Mismatches:
Indels:

1779 592 0 1 0

Gaps:

Score:

Pred. Alignment

No::

Scores:

중 유

र् 음 중 B

```
JOURNAL
PUBMED
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 10
AY937250
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hominidae; Homo.

1 (bases 1 to 1779)

2 hang, X.Y., Zhang, H.J., Zhang, Y., Fu, Y.J., He, J., Zhu, L.P.,

Rang, S.H. and Liu, L.

Wang, S.H. and Liu, L.

Identification and expression analysis of alternatively spliced isoforms of human interleukin-23 receptor gene in normal lymphoid cells and selected tumor cells

cells and selected tumor cells

Immunogenetics 57 (12), 934-943 (2006)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens interleukin
alternatively spliced.
AY937250
AY937250.1 GI:62870698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (16-FRB-2005) Microbiology and Etiology, Paking Un
Medical College, #5 Dong Dan San Tiao, Beijing 100005, China
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Zhang, X.-Y., Zhang, Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16372191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PheAsnArgIleSerLeuLeuGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ValAsnGluGluLeuProSerIleAsnThrTyrPhsProGlnAsnIleLeuGluSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TICAATAGGATTTCACTCTTGGAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (bases 1 to 1779)
                                                       /codon_start=1
/product="interleukin 23 receptor isoform 1"
/product="interleukin 23 receptor isoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoformitsoform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="type I
spliced"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /map="1p31.2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo Bapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/chromosome="1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                EELPSINTYFPQNILESHFNRISLLEK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cytokine receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wang, S.-H. and Liu, L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RNA linear
isoform 1 mRN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IL-23R1; alternatively
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mRNA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRI 07-FEB-2006
, partial cds,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 600
```

```
유정
                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                            8
                                                           중 음 중 음
                                                                                                                    ર્
                                                                                                                                   밁
                                                                                                                                                 정 유
                                                                                                                                                                             S
                                                                                                                                                                                                                       DЪ
                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                 당
                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                        음 성
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                      문
                                 S
                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-667-289-2 (1-629)
                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                            137
                                   357
                                                                                                                                                     277
                                                                                                                                                                   661
                                                                                                                                                                                  257
                                                                                                                                                                                                601
                                                                                                                                                                                                               237
                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                            217
                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                        197
                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                     177
                                                                                                                                                                                                                                                                                                                                 157
                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                          117
                                                                                                                                                                                                                                                                                                                                                                                                          181
        377
                      961
                                                  901
                                                                337
                                                                                                          781
                                                                                                                        297
                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                        97
                                                                                                                                                                                                                                                                                                                                                                                                                                                    77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GluProAlaThrIlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIle
                                                                                                                 GlnGluThrGlyLysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrPro
                                                                                                                                                                                                                             AsnArgSerPheArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeu
                              LeuLeuGlyMetIleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePhe
                                                           ThrValAlaSerIleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeu
                                                                              GAAACAGTTCCCCAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTA
                                                                                      GluThrValProGlnValThrSerLyBAlaPheGlnHisAspThrTrpAsnSerGlyLeu
                                                                                                           CAAGAAACAGGCAAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCT
                                                                                                                                             ValGlnGlnSerGluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCys
                                                                                                                                                                    TACAAGGCTACAACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATAT
                                                                                                                                                                            TyrLysAlaThrThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyr
                                                                                                                                                                                                 AAGACCATAATTTATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGA
                                                                                                                                                                                                        LysThrIleIleTyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArg
                                                                                                                                                                                                                                                          CAAGCAGCAAACGCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGAT
                                                                                                                                                                                                                                                                 GlnAlaAlaAsnAlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAsp
                                                                                                                                                                                                                                                                                                                  GAATATTC
                                                                                                                                                                                                                                                                                                                                                       GluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThr
                                                                                                                                                                                                                                                                                                                                                                            LysAspIleSerSerGlyTyrProProAspIleProAspGluValThrCysValIleTyr
                                                                                                                                                                                                                                                                                                                                                                                                                  AlaSerMetTyrCysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGly
                                                                                                                                                                                                                                                                                                                                                                                                                                      IleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAACCAGCCACAATTTTTAAGATGGGTATGAATATCTCTATATATTTGCCAAGCAGCAATT
                      ACAGTTGCTTCCATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTT
                                                                                                                                                                                                                                                                                                                                               ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AY937250 (1-1779)
                      1020
                                                   960
                                                                              900
                                                                                                                                                                                                 660
                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                        216
                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                     196
                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                  176
                                                                                                                                                                                                                                                                                                                                                               156
                                                                                                                                                                                                                                                                                                                                                                                           136
                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                      96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
         396
                                                                 356
                                                                                                                        316
                                                                                                                                       780
                                                                                                                                                     296
                                                                                                                                                                   720
                                                                                                                                                                                   276
                                                                                                                                                                                                                256
                                                                                                                                                                                                                                            236
                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  76
                                                                                                                        RESULT 11
AX467352
LOCUS
DEFINITION
ACCESSION
VERSION
                                                        REFERENCE
AUTHORS
TITLE
                                                                                                  KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                            유
                                                                                                                                                                                        S
                                                                                                                                                                                                        밁
                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                         뭐
                                                                                                                                                                                                                                                                                                                                    :5
                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                              경· 음 경 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                   FEATURES
                                                   JOURNAL
                             воитсе
                                                                                                                                                                            1741
                                                                                                                                                                                                                                    1621
                                                                                                                                                                                                                                                                                              1501
                                                                                                                                                                                                                                                                                                                          1441
                                                                                                                                                                                                                                                                                                                                                       1381
                                                                                                                                                                                                                                                                                                                                                                                    1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1081
                                                                                                                                                                                                         1681
                                                                                                                                                                                                                                                                 1561
                                                                                                                                                                                                                                                                                                                                                                                                                                              1201
                                                                                                                                                                                                                                                                                                                                                                                                                1261
                                                                                                                                                                                          617
                                                                                                                                                                                                                       597
                                                                                                                                                                                                                                                   577
                                                                                                                                                                                                                                                                               557
                                                                                                                                                                                                                                                                                                           537
                                                                                                                                                                                                                                                                                                                                         517
                                                                                                                                                                                                                                                                                                                                                                      497
                                                                                                                                                                                                                                                                                                                                                                                                  477
                                                                                                                                                                                                                                                                                                                                                                                                                               457
                                                                                                                                                                                                                                                                                                                                                                                                                                                            437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     397
                                                                              Hominidae; Homo.
```

```
밁
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1021 AACAGATCATTCCGAACTGGGATTAAAAGAAGGATCTTGTTGATAATACCAAAGTGGCTT
                                                                                                                                                                                        Homo sapiens (human)
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                           Cosman,D.J., Mosley,B.A., Bird,T.A., Hematopoietin receptors hpr1 and hpr2 Patent: WO 0229060-A 22 11-APR-2002; Immunex CorporatioN (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                      AX467352
Sequence 22 from Patent
AX467352
AX467352.1 GI:21900588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CysLeuGlyIleValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuGluSerHisPheAsnArgIleSerLeuLeuGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATGATTCACCCAGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AsnAspSerProSerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GluCysSerSerProAspIleGlnAsnSerValGluGluGluThrThrMetLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HisLeuSerAsnAsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProLeuGluThrArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATAAAAGAAATCTTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IleLysGluIlePheIleProGluHisLysProThrAspTyrLysGluAsnThrGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAACTTATGAATAATTACAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GluLeuMetAsnAsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGlu
                                                                                                                                                                                                                                                                                                                                                                                            TTGGAAAGCCACTTCAATAGGATTTCACTCTTGGAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATCTCAGCAATAATAATGAAATTACTTCCTTAACACTTAAACCCACCAGTTGATTCCTTA
           /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                1. .1698
                                                                                                                                                                                                                                                                                                            1698 bp
WO0229060.
                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                           Dubose, R.F.
                                                                                                                                                                                                                                                                                                                                                                                             1779
                                                                                                                                                                                                                                                                                                                                                                                                                            629
                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                             and Wiley,S
                                                                                                                                                                                                                                                                                                                             PAT 16-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              416
```

70704	Qy 301 LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro 320
	Db 841 GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC 900
1676 by mount linear	281 GlupheTyrLeuGluproAsnIleLysTyrValPheGlnValArgCy
	OY 261 ThrasmGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer 280
Db 1609 GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTTGGAAAGCCAC 1668 Oy 621 PheAsnArqIleSerLeuLeuGluLys 629	Db 721 TATTGGGATAGTCAAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA 780
Qy 601 ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis 620	661 TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCCAAGACCATAATT 7
581 SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle	OU GCALLAGGCALGGAAGAGICAGAAACAGALICACCIGGAALGALAGGCALAGCE 660 OY 221 SerAlaAlaVallleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle 240
Db 1489 CCTGACATACAAAACTCAGTAGAAGGAAGGAAACCACCATGCTTTTGGAAAAATGATTCACCC 1548	201 AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValIlePro 2
1429 AGCAACACAATATTTCTTGGAGAATTAAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT	OY 181 IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn 200
1369	OY 161 HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn 180
Db 1309 AÄTÄÄTGÄÄÄTTÄČTTCCTTÄÄCÄCTTÄÄACCCAGCTAGATTGATTCCTTAGACTCAGGAAAT 1368 Qy 521 AsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSerLeu 540	
501 AsnAsnGluIleThrSerLeuThrLeuLysDroProValAspSerLeuAspSerGlyAsn 	Qy 141 AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal 160
Db 1249 AACACTGGATATAAAACCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAAT 1308	121 SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly
1189 AGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATTATTTCCTGATCTC	OY 101 CYSThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer 120
Db 1129 TTCATCCCAGAACACAAGCCTACAAGAACAAGAAGAAGAAGAATACAGGACCCCTGGAGACA 1188 Qy 461 ArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAspLeu 480	241 AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
441 PheIleProGluHistysProThrAspTyrtysLysGluAsnThrGlyProLeudluThr	Oy 81 ABRIYSThrThrAlaArgLeuTrpTyrLyBAsnPheLeuGluProHisAlaSerMetTyr 100
CY 421 ABRABNSETSETGINGINVALLENTYTVALABPTCOMBCITEINTSGITTAGINGITTAGINGITTAGINGITTAGINGITTAGINGITTAGINGITTAGINGITTAGINGITTAGINGITTAGINGINGITTAGINGINGINGINGINGINGINGINGINGINGINGINGING	61 ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
1009 CCTAATATGAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT	Oy 41 IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln 60
Db 952ACAGGGATTAAAAGAAGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT 1008 Ov 401 ProAsnMetIvsAsnSerAsnVallvsMetLeuGlnGluAsnBerGluLeuMetAsn 420	61 TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
Qy 381 ArgThrGlyIleLysArgArgIleLeuLeuIleDroLysTrpLeuTyrGluAspIle 400	21 CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr 4
951	Oy 1 Methan***ValThrIleGlnTrpApplaValTleAlaLeUTyrIleLeuPheSerTrp 20
361 IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe	-10-667-289-2 (1-629) x AX467352 (1-1698)
951	2 Gaps:
Db 951 951 Ov 341 IlasarThrGlvHisLauThrSarAapAanArcGlvAspIlaGlvLauLauLauGlvMat 360	Percent Similarity: 89.3% Conservative: 0 Best Local Similarity: 89.3% Mismatches: 3 Onery March: 88.8% Indels: 64
321 GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer	0 Length: 2952.00 Matches:
Db 901 AAAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAA 951	Alignment Scores.

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
PUBMED
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
SOURCE
                                                                        8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                         5
                                                  밁
                                                                                                                                                                 ર્શ
                                                                                                                                                                                        문
                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                             US-10-667-289-2 (1-629) x AY937253 (1-1676)
                                                                                                                                                                                                                                                                                                                 Score:
                                                                                                                                                                                                                                                                                                                                        Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                              No : :
                                                          181
                                                                                                        121
                                                                              97
                                                                                                                           77
                                                                                                                                                    2
                                                                                                                                                                         57
                                                                                                                                                                                                 _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hominidae; Homo.

1 (bases 1 to 1676)

2 hang, X.Y., Zhang, H.J., Zhang, Y., Fu, Y.J., He, J., Zhu, L.P.,

Zhang, S.H. and Liu, L.

Identification and expression analysis of alternatively spliced isoforms of human interleukin-23 receptor gene in normal lymphoicells and selected tumor cells

Immunogenetics 57 (12), 934-943 (2006)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Submitted (16-FEB-2005) Microbiology and Etiology, Peking Union
Medical College, #5 Dong Dan San Tiao, Beijing 100005, China
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Zhang, X.-Y., Zhang, Y.,
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6372191
            IleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHis
                                                                                                                                                    LysAsnCysGlnProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGln
                                                                                                                                                                                               GAACCAGCCACAATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATT
                                                                                                                                                                                                              GluProAlaThrIlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIle
                                                                                                        ATCACAAGGATTAATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (bases 1 to 1676)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                        /translation="Epatifkommnisiycqaaikncqprkliffykngikerfqitri

KKTTARLMYKNFLEPHASMYCTAECPKHFQETLICGKDISGEPDIDDEVTRVIYEY

SGNMTCTWANAGKLTYLDIKYVVHVKSLETEEQQYLTSS YINISTDSLQGKKYLWY

QAANALGMEESKQLQHIDIKYVKSLETEEQQYLTSS YINISTDSLQGKKYLWY

QAANALGMESKQLQHIDIKYVKSLETERNIKYVPQVFQTIYWDSCQTIEKVSCE

MRYKATTNQTWAVKEFDTNFTYVQQSEFYLEPNIKYVPQVFQETGKGYWQPWSSPFF

HKTPETVPQVTSKAFQHDTWNSGLTVASISTGHLTSGLKEGSYC"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note="IL-23R soluble receptor; IL-23R3-F1; lacks exon 9 (encodes transmembrane domain), which leads to the production of a IL-23R soluble ectodomain; alternatively spliced"
                                                                                                                                                                                                                                                                                                                                                                                                                                             /codon_start=1
/product="interleukin 23
/protein_id="AAY18348.1"
/db_xref="GI:62870705"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/chromosome="1"
                                                                                                                                                                                                                                                                      0
2889.00
93.4%
93.4%
86.9%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .1676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chordata; Craniata; Vertebrata; Euteleostomi; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zhang, H.-J.,
                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wang, S.-H.
                                                                                                                                                                                                                                                                   1676
554
0
5
35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       isoform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              in normal lymphoid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Liu, L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2
                                   136
                                                                                                                                                    120
                                                                                                                                                                                                 60
                                                          240
                                                                                116
                                                                                                        180
                                                                                                                             96
Ś
                     B
                                        δ
                                                                     밁
                                                                                    Ś
                                                                                                          밁
                                                                                                                                   Ś
                                                                                                                                                               밁
                                                                                                                                                                              5
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                    뭥
                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                       당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                      1158
                                                                                                                   1098
                                                                                                                                                               1038
                                                                                            457
                                                                                                                                       437
                                                                                                                                                                                      417
                                                                                                                                                                                                             978
                                                                                                                                                                                                                                 397
                                                                                                                                                                                                                                                          937
                                                                                                                                                                                                                                                                               377
                                                                                                                                                                                                                                                                                                        936
                                                                                                                                                                                                                                                                                                                            357
                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                                                                                                         317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                          337
                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProLeuGluThrArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyr
                                                                                                                              IleLysGluIlePheIleProGluHisLysProThrAspTyrLysLysGluAsnThrGly
                                                                                                                                                                             GluLeuMetAsnAsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGlu
                                                                                                                                                                                                          ThrValAlaSerIleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                               GluThrValProGlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnGluThrGlyLy8ArgTyrTrpGlnProTrpSerSerProPhePheHi8Ly8ThrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TyrLysAlaThrThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LysThrIleIleTyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerTyrIleAsnIleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThr
  HisLeuSerAsnAsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeu
                                     IleProAspLeuAsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySer
                                                                                                                   GAACTTATGAATAATTACAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAG
                                                                                                                                                                                                                                                                                                                                                                                                    GAAACAGTTCCCCAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                CAAGAAACAGGCAAAGGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TACAAGGCTACAACAAACCTTGGAATGTTAAAGAATTTGACACCAATTTTACATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGACCATAATTTATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAATATTCAGGCAACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACA
                                                                                                                                                                                                                                                                                                                              LeuLeuGlyMetIleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePhe
                                                                      1217
                                                496
                                                                                                                   1157
                                                                                                                                                                 1097
                                                                                                                                                                                                             1037
  516
                         1277
                                                                                            476
                                                                                                                                          456
                                                                                                                                                                                      436
                                                                                                                                                                                                                                    416
                                                                                                                                                                                                                                                           977
                                                                                                                                                                                                                                                                                 396
                                                                                                                                                                                                                                                                                                        936
                                                                                                                                                                                                                                                                                                                               376
                                                                                                                                                                                                                                                                                                                                                                          356
                                                                                                                                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                                                                                                         336
                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
```

```
JOURNAL
PUBMED
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 13
AY937254
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                          SdS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                557
                                                                                                                                                                                                                                                                                                                                                                                                                     Zhang,X.-Y., Zhang,Y., Zhany,n.-., Direct Submission
Direct Submission
Submitted (16-FEB-2005) Microbiology and Etiology, Peki Submitted (16-FEB-2005) Microbiology and Etiology (16-FEB-2005) Microbiology (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 1676)
Zhang, X.Y., Zhang, H.J., Zhang, Y., Fu, Y.J., He, J., Zhu, L.P.,
Zhang, S.H. and Liu, L.
Identification and expression analysis of alternatively spliced
isoforms of human interleukin-23 receptor gene in normal lymphoid
cells and selected tumor cells
cells and selected tumor cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AY937254 1676 bp mRNA linear Homo sapiens interleukin 23 receptor isoform 3 F3 cds, alternatively spliced.
AY937254 AY937254.1 GI:62870706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6372191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuGluSerHisPheAsnArgIleSerLeuLeuGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CysLeuGlyIleValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATGATTCACCCAGGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AsnAspSerProSerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACTCAGGAAATAATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTCTCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AspSerGlyAsnAsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTGGAAAGCCACTTCAATAGGATTTCACTCTTGGAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGTTTGGGGATCGTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (bases 1 to 1676)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                        College, #5 Dong Dan
Location/Qualifiers
/codon_start=1
/product="interleukin 23 receptor isoform 3 F3"
/product="interleukin 23 receptor isoform 3 F3"
/protesin_id="AAY18349.1"
/db_xref="G1:62870707"
/translation="MEFWANCFCHLYRAPYFWIKRRILLLIPKWLYEDIPNWKNSNVVKTRADELWNNNSSEQVLYVDPWITEIKEIFIPEHKPTDYKKENTGPLETRDYPQNS
KMLQENSELWNNNSSEQVLYVDPWITEIKEIFIPEHKPTDYKKENTGPLETRDYPQNS
LFDNTTVVYIPDLNTGYKEQISWFLPEGSHLSNNNEITSLTLKPPVDSLDSGNNFRLQ
KHPNFAFSVSSVNSLSNTIFLGELSLILNQGECSSPDIQNSVEEETTMLLENDSPRET
                                                                                                                                                                   /note="II-23R endodomain protein; II-23R3-F3; l
(encodes transmembrane domain, which leads to
production of an intracellular endodomain II-23
by a frameshift; alternatively spliced"
                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/chromosome="1"
                                                                                                                                                                                                                                                                              /map="1p31.2"
                                                                                                                                                                                                                                                                                                                                                                                       1. .1676
                                                                                                                                                                                                                                                          .>1676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mRNA,
                                                                                                                                                                                         3-F3; lacks exon
ads to the
n IL-23R generate
                                                                                                                                                                                                                                                                                                                                                                                                                                Peking Un
005, China
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Liu, L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-FEB-2006
partial
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Union
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score:
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                Ś
                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                          밁
                                                    8
                                                                                                      뫄
                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                               닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-667-289-2 (1-629)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Мо.
:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scores:
                                                                                                                                                                                                                                  277
                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                        257
                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                            841
                                                                                                          781
                                                                                                                                                    297
                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                          237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         37 GluProAlaThrIlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIle
                        IleThrargIleasnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAACCAGCCACATTTTTAAGATGGGTATGAATATCTCTATATATTTGCCAAGCAGCAATT
                                                                                                                                     GlnGluThrGlyLysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrPro
                                                                                                                                                                                                                                                                                                      TyrLysAlaThrThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyr
                                                                                                                                                                                                                                                                                                                                                                                           LysThrIleIleTyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                    IleValIleProSerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnAlaAlaAsnAlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerTyrIleAsnIleSerThrAspSerLeuGlnGlyGlyLysLysLysTyrLeuValTrpVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LysTyrValValHisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAATATTCAGGCAACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LysAspIleSerSerGlyTyrProProAspIleProAspGluValThrCysVallleTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTTCTATGTACTGCACTGCATGATGTCCCAAACATTTTCAAGAGACACTGATATGTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AlaSerMetTyrCysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LysAsnCysGlnProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGln
                                                                                                                                                                                             GTGCAACAGTCAGAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGT
                                                                                                                                                                                                                     ValGlnGlnSerGluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCys
                                                                                                                                                                                                                                                                              TACAAGGCTACAACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATAT
                                                                                                                                                                                                                                                                                                                                                                 AAGACCATAATTTATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAATACGTGGTACATGTGAAGAGTTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AMAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGAAGTAACCCGTGTCATTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAAGAAACAGGCAAAGGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAAGCAGCAAACGCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCTATATTAACATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              I PEQTLLPDEFVSCLGI VNEBLPS INTY FPQNI LESHFNR I SLLEK'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
2889.00
93.4*
93.4*
86.9*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                x AY937254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (1-1676)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1676
554
5
35
```

176

780 316 840 360

156

300

136

240

180

96

120

ð 맑 S

```
RESULT 14
AY937251
LOCUS
                                            SOURCE
ORGANISM
                                                                                      ACCESSION
VERSION
                                                                         KEYWORDS
                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1098
                                                                                                                                                                                                         1638
                                                                                                                                                                                                                                                                  1578
                                                                                                                                                                                                                                                                                                                           1518
                                                                                                                                                                                                                                                                                                                                                                                      1458
                                                                                                                                                                                                                                                                                                                                                                                                                                               1398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       417
                                                                                                                                                                                                                                    617
                                                                                                                                                                                                                                                                                                                                                       577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            377
                                                                                                                                                                                                                                                                                                                                                                                                                  557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              337
                                                                                                                AY937251
1618 bp mRNA linear PRI 07-FEB-2006 Homo sapiens interleukin 23 receptor isoform 2 F1 mRNA, partial cds, alternatively spliced.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae; Homo.
                                            Homo sapiens
                                                         Homo sapiens (human)
                                                                                       AY937251.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LeuGluSerHisPheAsnArgIleSerLeuLeuGluLys 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCCTGGAGACAAGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CysLeuGlyIleValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIle
                                                                                                                                                                                                                                                                                                                                           AsnAspSerProSerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSer
                                                                                                                                                                                                                                                                                                                                                                                       GAATGCAGTTCTCCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                    GluCysSerSerProAspIleGlnAsnSerValGluGluGluThrThrMetLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGAATTCACTAAGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ValAsnSerLeuSerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACTCAGGAAATAATCCCCAGGTTACAAAAGCATCCTAATTTTTGCTTTTTCTGTCTCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspSerGlyAsnAsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATCTCAGCAATAATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HisLeuSerAsnAsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTCCTGATCTCAACACTGGATATAAACCCCAAATTTCAAATTTTCTGCCTGAGGGAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IleProAspLeuAsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProLeuGluThrArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TATGAAGATATTCCTAATATGAAAAACAGCAATGTTGTGAAAAATGCTACAGGAAAATAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TyrGluAspIleProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AsnArgSerPheArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuLeuGlyMetIleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATGATTCACCCAGGGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCC
                                                                                      GI:62870700
                                                                                                                                                                                                         1676
                                                                                                                                                                                                                                                                    1637
                                                                                                                                                                                                                                                                                                                                                                                       1517
                                                                                                                                                                                                                                                                                                                                                                                                                                                1457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1037
                                                                                                                                                                                                                                                                                                616
                                                                                                                                                                                                                                                                                                                             1577
                                                                                                                                                                                                                                                                                                                                                         596
                                                                                                                                                                                                                                                                                                                                                                                                                   576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
PUBMED
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
   문
                     δ
                                                         밁
                                                                                   Ś
                                                                                                                  밁
                                                                                                                                       5
                                                                                                                                                                           밁
                                                                                                                                                                                                   S
                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-667-289-2 (1-629)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No.:
                                                                                                                   301
                                                                                                                                               137
                                                                                                                                                                            241
                                                                                                                                                                                                        117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scores:
                                                            361
                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                121
    388
                                                                                      157
                                                                                                                                                                                                                                                                  97
                                                                                                                                                                                                                                                                                                                                                                                      57
                                                                                                                                                                                                                                                                                                                           77
                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                  37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 1618)
Zhang,X.Y. Zhang,H.J., Zhang,Y., Fu,Y.J., He,J., Zhu,L.P.,
Wang,S.H. and Liu,L.
Identification and expression analysis of alternatively spliced
isoforms of human interleukin-23 receptor gene in normal lymphoi
cells and selected tumor cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (16-FEB-2005) Microbiology and Etiology, Peking Un.
Medical College, #5 Dong Dan San Tiao, Beijing 100005, China
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Zhang, X.-Y., Zhang
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Immunogenetics 57 (12), 934-943 (2006) 16372191
                                                                                                                                                                                                                                                                                                                                                                                                                   GluproalaThrIlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIle
                                                                                                                                                                                                                                                                                                                                                                          LysAsnCysGlnProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGln
                                                                                                                                                                                                                                                                                                ATCACAAGGATTAATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACAT
                                                                                                                                                                                                                                                                                                                                                          GluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThr
                                                                                                                                                                                           LysAspIleSerSerGlyTyrProProAspIleProAspGluValThrCysValIleTyr
                                                                                                                                                                                                                                     GCTTCTATGTACTGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGA
                                                                                                                                                                                                                                                    AlaSerMetTyrCysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGly
                                                                                                                                                                                                                                                                                                               IleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHis
                                                                             GAATATTCAGGCAACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACA
                                                                                                                                                                            AAAGACATTTCTTCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTAT
                             rSerTyrIleAsnIleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpVa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1 to 1618) '
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /product="interleukin 23 receptor isoform 2 P1"
/protein id="AAX18346.1"
/db xref="G1:62870701:
/tanslation="EpriffwgTinisiyCQAAIKNCQPRKLHFYKNGIKERFQITRI
NKTTAALWYKNFLEPHASMYCTAECPKHFQETLICGKDISSGYPPDIPDEVTCVIYEY
SGNMTCTWNAGKLTYIDTKYVVHVKSDTFCSRHFQG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /map="1p31.2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          chromosome="1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9.66e-307
2785.00
90.2%
89.9%
83.7%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            x AY937251 (1-1618)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Zhang, Y., Wang, S.-H. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Liu, L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1618
534
2
3
55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     lymphoid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Union
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  exon
                                                                                                                                                                                                                                                                                                 180
    388
                                 196
                                                             388
                                                                                         176
                                                                                                                     360
                                                                                                                                                  156
                                                                                                                                                                               300
                                                                                                                                                                                                           136
                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                    116
                                                                                                                                                                                                                                                                                                                              96
                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                       76
                                                                                                                                                                                                                                                                                                                                                                                                                      60
```

밁

S

음 성

5

占 S 밁 8 В S 밁

ર્ક

片 ş 명 ð B ठ

밁

S 밁

吊

밁 ঠ 밁 S

밁 ક 밁

9 6	rValAsnSerLeuSerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnG 	ω 5 i
536 1338	6 uAspSerGlyAsnAsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSe 	51 127
516 1278 ·	6 rHisLeuSerAsnAsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLe	49 121
496 1218	-	5 7
47	6 yProLeuGluThrArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTy	9 5
10	luHisLysProThrAspT 	ω w
	rGluLeuMetAsnAsnAsnSerSerGluGlnValLeuTyrValAspProMetIleTi 	7 1
416 978	6 uTyrGluAspIleProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSe	μ 0
396 918	6 eAsnargSerPheArgThrGlyIleLysargArgIleLeuLeuLeuIleProLysTrpLe	5 7
376 858	6 uLeuLeuGlyMetIleValPheAlaValMetLeuSerTleLeuSerLeuIleGlyIlePh 	
356 798	6 uThrvalAlaSerIleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLe	ω ω
336 738	6 oGluThrValProGlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLe	7
316 678	6 8GlnGluThrGlyLy8ArgTyrTrpGlnProTrpSerSerProPhePheHi8Ly8ThrPr 	7
296 618	6 rValGlnGlnSerGluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCy	5
276 558	6 gTyrLysAlaThrThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTy	
256 498	6 OLYSThrIleIleTyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetAr 	w w
236 438	6 pIleValIleProSerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrValPr	38:
388		œ
216	6 lGlnAlaAlaAsnAlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAs	19

중 유

밁

ક

ક 닭 र्

뭉

유

밁 ફ 밁 ક 밁 ર્શ 밁

밁 र् 밁 S 문 ঠ 맑

Alignment Pred. No.:

Scores:

No.:

Score:

Percent Similarity:
Best Local Similarity:
Query Match:
DB:

9.66e-307 2785.00 90.2% 89.9% 83.7%

Length:
Matches:
Conservative:
Mismatches:
Indels:

1618 534 2 3 55

8 문 \$ 밁 S

```
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
PUBMED
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 15
AY937252
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                             gg
                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hominidae; Homo.

1 (bases 1 to 1618)

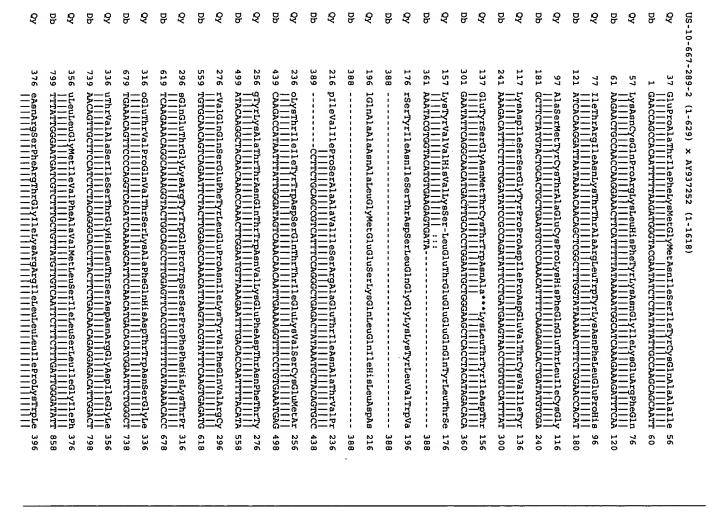
2 hang, X.Y., Zhang, H.J., Zhang, Y., Fu, Y.J., He, J., Zhu, L.P.,

Wang, S.H. and Liu, L.

Identification and expression analysis of alternatively spliced isoforms of human interleukin-23 receptor gene in normal lymphoid cells and selected tumor cells

Cells and selected tumor cells

Immunogenetics 57 (12), 934-943 (2006)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens interleukin 23 receptor isoform 2 F2 cds, alternatively spliced.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Zhang,X.-Y., Zhang,Y., Wang,S.-H. and Liu,L. Direct Submission
Submitted (16-FEB-2005) Microbiology and Etiology, Paking Union Medical College, #5 Dong Dan San Tiao, Beijing 100005, China
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AY937252.1 GI:62870702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           yGluCysSerSerProAspIleGlnAsnSerValGluGluGluThrThrMetLeuLeuGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   eLeuGluSerHisPheAsnArgIleSerLeuLeuGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rCysLeuGlyIleValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAATGATTCACCCAGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTTGTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         uAsnAspSerProSerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTGGAAAGCCACTTCAATAGGATTTCACTCTTGGAAAAG 1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGTTTGGGGATCGTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATAT 1578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (bases 1 to 1618)
                                                                                                                                                                                                                                                                                                                                                                                                                                                         College, #5 Dong Dan
Location/Qualifiers
               /codon_start=1
/product="interleukin 23 receptor 1soform 2 F2"
/protein_id="anay18347.1"
/protein_id="anay18347.1"
/db_xref="G1:62870703"
/translation="mrykathyologurphyvoossefylspnikyvfovrcos
Tokrywopwisspf=hkrpstvfovtskafqhdtwnsgltvasistghitsdnrodigl
LIGMIVFAVMLSILSLIGIFNRSFRTGIKRRILLLIFKWLYSDIFNMKNSNVVXMLQB
MSELMNNNSSBOYLYVDPMITSIKE/FIPEHKPTDYKKENTOPLETRDYFONSLFDNT
TVAYIPDLDTGYKPQISNFLPEGSHLSNNNEITSLTLKPPUSGINGRUNFRLOKHPNF
AFSVSSYNSLSNTIFLGELSLILNOGSCSSPDIONSTETTMLENDSPSETIPEGT
LLPDEFVSCLGIVNEELPSINTYFFQNILESHFNRISLLEK"
                                                                                                                                                                                                                                          /note="IL-23R truncated endodomain protein; IL-23R2-F2;
encoded by the second frame of IL-23R isoform 2, which
lacks exon 5; alternatively spliced"
                                                                                                                                                                                                                                                                                                                                 /map="1p31.2"
                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/chromosome="1"
                                                                                                                                                                                                                                                                                                                                                                                                                                      .1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRI 07-FEB-2006 mRNA, partial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      596
```



TACAGATCATTCCGAACTGGAATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCT 396 UTYGGLUSEDITEPFOARDMELLYSARDSEARDVALLYSMELLEUGINGGLUARDSE 919 TTATGAAGGTATTCCTAATATGAAAACCGCCAATGTTGGAAAATGCTACAGAAAATAG 416 CILLEUWELARDARDAATTCCAGTGAGCAGGCTCCTATATGTTGATACCCACGAAAATAG 436 UTJELYSGLUILEPHEILEPROGLUHISLYSPOTDTAASTTGATCCCATGATTACAAA 436 UTJELYSGLUTLEPHEILEPROGLUHISLYSPOTDTAASTTGATCCCATGATTACAAA 436 UTJELYSGLUTLEPHEILEPROGLUHISLYSPOTDTAASTTGATCCCATGATTACAAA 436 UTJELYSGLUTLEPHEILEPROGLUHISLYSPOTDTAASTTGATCCCATGATTACAAA 437 CALLEUUGLUTLAAGGAACTTCCCGCAAAAACTCGCTATATGTTGATCCCAAGAAACAATACAAA 438 CACCCTGGAGACAAGAGACTACCCGCAAAAACTCGCTATTCGACAATACTACAAGAATACAAAA 439 ACCCCTGGAGACAAGAGACTACCCGCAAAAACTCGCTATTCGACAATACTACAGTTGCATA 439 ACCCCTGGAGACAAGAGACTACCCGCAAAAACTCGCTATTCGACAATACTCACAGTTGCATA 439 ACCCCTGGAGACAAGAGACTACCCGCAAAATTCCAAAATTTCTACCCTGAGGGAAA 430 CHISLEUUGLUTLAAGAGACTACCGGAAAACCCCAAATTTCAAAATTTCTCCCTGAGGGAAA 431 CHISLEUUGLUTLAAGAGACTACCGCAAAACTCGCCTATTCCAAAATTTCTCCCTAAAATTTCTCCCTAAAATTTCTCCCTAAAATTTCTCCCTAAAATTTCCACGATTGAATTTCTCCCTAAAATTTCTCCCTAAAATTTCCTCCTAAAATTTCTCCCTAAAATTTCCTCC

Search completed: October 14, 2006, 17:27:19 Job time: 9899 secs

The solo of the life of the li

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Post-processing: Minimum Match 0% Maximum Match 100%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Minimum
                                                                                                                                                                                                                                                  0.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                            a
         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB
       2857.4
253.4
253.4
253.4
253.4
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
2552.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query
Match Length |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-667-289-1
2857.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  October 14, 2006, 12:54:04 ; Search time 518 Seconds (without alignments)
10327.220 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1403666 seqs, 935554401 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IDENTITY NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Issued_Patents_NA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Listing first 45 summaries
       /EMC_Celerra_SIDS3/ptodata/2/ina/1_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/5_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/6A_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/6B_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/7_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/PCTUS_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/PCTUS_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/PCTUS_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/PCCMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/PCCMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/BCCMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Copyright
                                                                      98844
143774
144034
144034
601
90618
90618
90618
33478
81001
168971
33478
81001
443394
443394
57859
57859
                          60424
118067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GenCore version 5.1.9 (c) 1993 - 2006 Biocceleration Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BB
US-09-853-180B-1
US-09-949-010-129
US-09-949-010-25
US-09-949-016-15964
US-09-949-016-15964
US-09-949-016-15964
US-09-949-016-13807
US-09-949-016-13815
US-09-949-016-13615
US-09-949-016-13754
US-09-949-016-12334
US-09-949-016-12334
US-09-949-016-12334
US-09-949-016-12334
US-09-949-016-12334
US-09-949-016-12334
US-09-949-016-146587
US-09-949-016-146587
US-09-949-016-146588
US-09-949-016-146588
US-09-949-016-146588
US-09-949-016-146588
US-09-949-016-146587
US-09-949-016-146588
US-09-949-016-146588
US-09-949-016-146587
US-09-949-016-146588
US-09-949-016-146588
US-09-949-016-146588
US-09-949-016-146588
US-09-949-016-146588
US-09-949-016-146588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUMMARIES
                                                                                                                                                                                                        Sequence 1, Appli
Sequence 29, Appl
Sequence 35, Appl
Sequence 35, Appl
Sequence 16281, App
Sequence 16281, App
Sequence 17013, A
Sequence 16296, A
Sequence 13807, A
Sequence 13807, A
Sequence 10151, A
Sequence 10154, A
Sequence 11754, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                        Sequence
Sequence
Sequence
                                                                                          Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                  e 11754, A
e 1, Appli
e 186635,
                      12978, A
12334, A
14657, A
14658, A
14948, A
12175, A
12175, A
                                                               14948,
```

											a							ი			
45	44	43	42	41	40	39	8	37	36	35	34	33	32	31	30	29	28	27	26	25	24
243	243	243	N	.,			N1	244.2	244	244	244	244	244	244	244	244	244		245	245	245
.0	o	.8	.44	44	244	244	44	.2	.2	.2	.4	.4	.4	.4	.4	.6	. 6	45	2	2	.4
80	8	8.	8.	8	8.	8.	8	8.	8	в	80	8.	8	œ	8.	8	.	8.	8.		&
ū	ū	Ü	Ü	ū	ū	U	Ü		ū	Ü	<u>.</u>	ð	ð	ð	ō	0	ð	Ó	ð	ð	<u>ه</u>
33536	28567	325791	53453	53442	51905	51905	37565	140224	601	601	68720	68719	37966	19990	19451	37692	28165	109	48318	38346	205163
w	w	w	ω	w	w	ω	w	w	w	ω	w	w	ω	w	ω	w	ω	w	w	w	w
US-09-949	US-10-418-036-23	US-09-768-185A-1	US-09-949	US-09-949	US-09-949-002-781	US-09-949	US-09-949	US-09-949	US-09-949	US-09-949	US-09-949	US-09-949	US-09-949	US-09-949	US-09-949	US-09-949	US-09-949	US-09-949	US-09-949	US-09-949	US-09-949
US-09-949-016-17034	-036-23	-185A-1	US-09-949-016-13370	-09-949-016-11921	-002-781	-09-949-002-667	US-09-949-016-15847	US-09-949-016-17002	-09-949-016-68387	US-09-949-016-38183	-09-949-016-14296	US-09-949-016-12799	US-09-949-016-12566	US-09-949-016-14967	US-09-949-016-13695	US-09-949-016-12089	US-09-949-016-17259	US-09-949-016-186634	US-09-949-016-15717	US-09-949-016-14502	US-09-949-016-17009
Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence
17034, A	23, Appl	1, Appli	13370, A	11921, A	781, App	667, App	15847, A	17002, A	68387, A	38183, A	14296, A	12799, A	12566, A	14967, A	13695, A	12089, A	17259, A	186634,	15717, A	14502, A	17009, A
			•	-	_	•	-	•	•	•		•	•		•	•					•

ALIGNMENTS

US-09-853-180B-1

Sequence 1, Application US/09853180B Patent No. 6756481

GENERAL INFORMATION:
APPLICANT: Chirica, Madaline
APPLICANT: Parham, Christi L.
APPLICANT: Kastelein, Robert A.
APPLICANT: Moore, Kevin W.
TITLE OF INVENTION: Mammalian Receptor Proteins; Related
FILE REFERENCE: DX01074

Reagents and Methods.

```
밁
                          δ
                                                                                                                                           US-09-853-180B-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/853,180B
CURRENT FILING DATE: 2001-05-10
PRIOR APPLICATION NUMBER: 60/203,426
PRIOR FILING DATE: 2000-05-10
NUMBER OF SEQ ID NOS: 4
SOFTWARE: PatentIn version 3.2
SEQ ID NO 1
LENGTH: 2859
                                                                 Query Match
Best Local Similarity
Matches 2859; Conserv
                                                                                                                                                      NAME/KBY: misc feature
LOCATION: (563)..553)
OTHER INFORMATION: originally filed.
                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                                             NAME/KEY: mat_peptide
LOCATION: (188)..(2005)
FEATURE:
                                                                                                                                                                                                                                                                                           OLIDER INFORMATION: k means g or t/u. OTHER INFORMATION: originally filed.
                                                                                                                                                                                                                                                                                                                     FEATURE:
NAME/KEY: misc_feature
LOCATION: (127)...(127)
OTHER INFORMATION: k means
                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: CDS
LOCATION: (119)..(2005)
                  GTGGTACGGGAATTCCATTGTGTTGGGCAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGT
 GTGGTACGGGAATTCCATTGTGTTGGGCAGCCAACAAGGGTGGCAGCCTGGCTCTGAAGT
                                                                 100.0%; Score 2857.4; ilarity 100.0%; Pred. No. 0; Conservative 0; Mismatches
                                                                                                                                                                         See page 12, line
                                                                                                                                                                                                                                                                                                                     See page 12, line 34, of patent application
                                                                                                       ВB
                                                                   0;
                                                                                                       ω
--
                                                                     Indels
                                                                                                     Length
                                                                                                                                                                          36,
                                                                                                                                                                            œ,
                                                                     0; Gaps
                                                                                                                                                                          patent application
 9
                                                                     0
                                                                                                                                                                              96
                                                                                                                                                                                                                                                                                                                         ag
```

1081 GGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCCAT 1140	961 ATTCTACTTGGAGCCAAACATTAAGTATGTATTTCAAGTGAGATGTCAAGAAACAGGCAA 1020 1021 AAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAACACCTGAAACAGTTCCCCA 1080	ABACCABACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGA ATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAA	AAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGA	TTGGGATAGTCAAACAACTAGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACAAC	TGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATTTA	ACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCTTC	CTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGTCCAAGCAGCAAGCA	TGTGAAGAGTTTAGAGACAGAAGAAGAAGAAGAGTATCTCACCTCAAGCTATATTAACAT	CATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTACA	TGATATCOGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGCAA	CACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAAGACATTTCTTC	61 TAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACAGATGCTTCTATGTACTG	AAGGAAACTTCATTTTTATAAAATGGCATCAAAGAAAGATTTCAAATCACAAGGATTAA	TTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAACC	TCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACAAT TCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACAAT TCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACAAT	61 GGAATTATGTGCTTCAAACAGGTTGAAAGAGGGAAACAGTCTTTTCCTGCTTCCAGACAT 120 121 GAATCAKGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGGTG 180	GGAATTATGTGCTTCAAACAGGTTGAAAGAGGGAAACAGTCTTTTCCTGCTTCCAGACAT
Oy 2161 ATAC Db 2161 ATAC Oy 2221 TGTT		Qy 2041 GCCT Db 2041 GCCT	Oy 1981 CAAT	Qy 1921 GAAT Db 1921 GAAT	Qy 1861 TGAP Db 1861 TGAP	Qy 1801 TGAC Db 1801 TGAC	Qy 1741 CAAC Db 1741 CAAC	Oy 1681 TCCC	Qy 1621 TAAT	Oy 1561 CACT	Qy 1501 AGAC Db 1501 AGAC	Qy 1441 CATC	Qy 1381 TAAN Db 1381 TAAN	Qy 1321 TAAT Db 1321 TAAT	Qy 1261 AACT Db 1261 AACT	Qy 1201 CGTC	Qy 1141 CTCT Db 1141 CTCT
ATACCTAGGTAGGGATTGCTGGGCCATATGATAGCATATGTTCAGTTCTACCAATCT 2220		GCCTTGCAATCTGAACTTGGGTTTTCCCTGCAATAGAAATTGAATTCTGCCTCTTTTTGA 2100	CAATAGGATTTCACTCTTGGAAAAGTAGAGCTGTGTGTCAAAATCAATATGAGAAAGCT 2040 	GAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCACTT 1980 	TGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATCGT 1920 	TGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCCAG 1860 	CAACACAATATTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCTCC 1800 	TCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGTGTGAATTCACTAAG 1740 	TAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAATAA 1680 	CACTGGATATAAACCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAATAA 1620 	AGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTCAA 1560 	CATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACAAG 1500 	TAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATCTT 1440 	TAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAATAA 1380 	AACTGGGATTAAAAGAAGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATTCC 1320 	CGTCTTTGCTGTTATGTTGTTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTCCG 1260	CTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATGAT 1200

밁 δ 밁 S

밁

Ś

밁

: ::

```
APPLICANT: Donna T. Ward
APPLICANT: Andrew T. Watt
TITLE OF INVENTION: ANTISENSE MODULATION OF WRN
FILE REFERENCE: RTS-0205
CURRENT APPLICATION MUMBER: US/09/791,211
CURRENT FILING DATE: 2001-02-23
NUMBER OF SEQ ID NOS: 90
LENGTH: 98844
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 2
US-09-791-211-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 10, Application US/09791211
Patent No. 6448080
GENERAL INFORMATION:
                                                       NAME/KEY: unsure
LOCATION: 24962
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 64383
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 65468
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 65469
OTHER INFORMATION: unknown
                                                                                                                                                                                                                                      ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGACGCCTCATGTATTTTTATAGAGTCAACTATTTCCTCTTTATTTTCCCCTCATTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGAGTCCAGCCTGGCCAATATGCTGAAACCCTGTCTCTACTAAAAATTACAAAAATTAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGAGTCCAGCCTGGCCAATATGCTGAAAACCCCTGTCTCTACTAAAATTTACAAAAAATTTAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATGCAAAACAGCTCTCTATTGTGTACAGAAAGGGTAAATAATGCAAAATACCTGGTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATGCAAAACAGCTCTCTATTGTGTACAGAAAGGGTAAATAATGCAAAAATACCTGGTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGACGCCTCATGTATTTTTTATAGAGTCAACTATTTCCTTTTATTTTCCCTCATTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTCCCGAAGGTGGAACATGCTTCATGGTCACACATACAGGCACAAAAAACAGCATTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGTCCCGAAGGTGGAACATGCTTCATGGTCACACATACAGGCACAAAAACAGCATTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCCATGCCTTTTTAATTTTAGCCATTCTTCTGCCTMATTTCTTAAAATTAGAGAATTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCCATGCCTTTTTAATTTTAGCCATTCTTCTGCCTMATTTCTTAAAATTAGAGAATTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AMAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                 WRN EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2280
                                                                                             LENGTH: 143776

TYPE: DNA
ORGANISM: Human
FEATURE:
NAME/KEY: misc_feature
LOCATION: (1)...(143776)
OTHER INFORMATION: n = A,7
US-09-949-001-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 3
US-09-949-001-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-791-211-10
                                                                                                                                                                                                                                                Sequence 29, Application US/09949001

Patent No. 6825336

Patent No. 682536

Patent No. 682536

Patent No. 682536

Patent No. 682536

PAPLICANT: VENTER, J. Craig et al.

APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: WITH OSTEOPOROSIS, METHODS OF DETECTION AND USES THEREOF FILE REFERENCE: CL000789

CURRENT APPLICATION NUMBER: US/09/949,001

CURRENT PILING DATE: 2003-01-15

PRIOR APPLICATION NUMBER: 60/231,323

PRIOR APPLICATION NUMBER: 60/231,323

PRIOR PILING DATE: 2000-09-08

NUMBER OF SEQ ID NOS: 848

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 29

LINCTUT 14275
                    Query Match
Best Local Similarity
Matches 275; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 275; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: unsure
LOCATION: 65470
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 65471
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 87130
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 89049
OTHER INFORMATION: unknown
OTHER INFORMATION: unknown
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 82308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         82188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            82008 AAAATAGCAAATTTTGGCCGGGCATGGTGGCTCACGCCTGTAGTCCCAGCACTTTTGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2547 AAAATAGAATCATTAGGCCAGGCGTGGTGGCTCATGCTTGTAATCCCAGCACTTTGGTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAAAAAAAAA 82320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     АЛЛАЛАЛАЛАЛА 2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCAGGAAGGCAGAGGTTGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AACCCTGTCTCTACTAAAAATACAACAATTAGCTGGGCGTGGTGGCAGGTGCCTGTAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AACCCTGTCTCTACAAAATTACAAAAATTAGCCGGCCATGGTGGCAGGTGCTTGTAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTTCGAGTCCAGCCTGGCCAATATGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGAGCCGAGATTGTGCCATTCCACTCCAGCCTGGGCAACAAGAGCGAAACTCTGTCTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCAGCTACTTGGGAGGCTGAGGCAGGGGAATTGCTTGAACTCGGGAGGTGGAGGTTGCAG 82247
                      Conservative
                                        8.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8.9%; Score 253.4; DB 3;
87.9%; Pred. No. 4.6e-57;
ative 1; Mismatches 37;
                                                                                                                      A, T, C
                    Score 253.4; DB 3
Pred. No. 5.5e-57;
1; Mismatches 37
                                                                                                                      0
F
                                                                                                                      ດ
                                                           u.
                                                           Length 143776;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 98844;
                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ,
,
                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
```

2846

82307

0

2786

82187

2726

82127

2666

82067 2606

0

á 뫄 ક В S 멍 ঠ В S 밁 S

```
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 片
                         $
                                                                                     ક
                                                                                                                          뭐
                                                                                                                                               8
                                                                                                                                                                             밁
                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                     , NAME/KEY: misc_feature
; LOCATION: (1)...(144034)
; OTHER INFORMATION: n = A,T,C
US-09-949-001-35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 4
US-09-949-001-35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           멎
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                          밁
                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 35, Application US/09949001

Patent No. 6825336

GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH OSTEOPOROSIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL000799
CURRENT APPLICATION NUMBER: US/09/949,001
CURRENT FILING DATE: 2003-01-15
PRIOR APPLICATION NUMBER: 60/231,323
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 848
SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 35
LENGTH: 144034
                                                                                                                                                                                                                                                                                                                   Query Match 8.9%;
Best Local Similarity 87.9%;
Matches 275; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Human FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
                                                                                                                                                                                        69739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         69859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        69799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      69739
                                                                                                                           69799
                                                                                                                                                                                                                                                       69679 AAAATAGCAAATTTTGGCCGGGCATGGTTGGCTCACGCCTGTAGTCCCAGCACTTTTGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           69919
                                                                                                                                                                                                                                                                             2547 AAAATAGAATCATTAGGCCAGGCGTGGTGGCTCATGCTTGTAATCCCAGCACTTTTGGTAG
             CCAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCAGGAAGGCAGAGGTTGCAC
                                                                                                                          AACCCTGTCTCTACTAAAAATACAACAATTAGCTGGGCGTGGTGGCAGGTGCCTGTAATC
                                                                                                                                            AACCCTGTCTCTACTAAAATTACAAAAATTAGCCGGCCATGGTGGCAGGTGCTTGTAATC
                                                                                                                                                                                         GCCGAGGTGGGTGACCTGAGGTCAGGAGTTCGAGACCTGGTCAACATGGTGA
                                                                                                                                                                                                          GCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTTCGAGTCCAGCCTGGCCAATATGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAAAAAAAAAAA 69991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAAAAAAAAAA 2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGAGCCGAGATTGTGCCATTCCACTCCAGCCTGGGCAACAAGAGCGAAACTCTGTCTCAA 69978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCAGCTACTTGGGAGGCTGAGGCAGGGGAATTGCTTGAACTCGGGAGGTGGAGGTTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCAGGAAGGCAGAGGTTGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACCCTGTCTCTACTAAAAATACAACAATTAGCTGGGCGTGGTGGCAGGTGCCTGTAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AACCCTGTCTCTAACTAAAATTACAAAAATTAGCCGGCCATGGTGGCAGGTGCTTGTAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCGAGGTGGGTCACCTGAGGTCAGGAGTTCGAGACCAGCCTGGTCAACATGGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTTCGAGTCCAGCCTGGCCAATATGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAATAGCAAATTTTGGCCGGGCATGGTGGCTCACGCCTGTAGTCCCAGCACTTTGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAATAGAATCATTAGGCCAGGCGTGGTGGTGGCTCATGCTTGTAATCCCAGCACTTTTGGTAG
                                                          CCAGCTACTTGGGAGGCTGAGGCAGGGGAATTGCTTGAACTCGGGAGGTGGAGGTTGCAG
                                                                                                                                                                                                                                                                                                                  Score 253.4; DB 3; Length 144034; Pred. No. 5.5e-57; 1; Mismatches 37; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                     Gaps
                            2846
                                                                                            2786
                                                                                                                                                                                                                         2666
                                                                                                                                                                                                                                                                                         2606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        69858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2606
                                                                                                                                                         2726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        69798
69978
                                                            69918
                                                                                                                           69858
                                                                                                                                                                                         69798
                                                                                                                                                                                                                                                         69738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          69918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    69738
                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   먉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
```

```
Sequence 162811, Application US/09949016

Patent No. 6812339

GENERAL INFORMATION:

APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

FILE REFERENCE; CLOOL307

CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT FILING DATE: 2000-04-14

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR APPLICATION NUMBER: 60/27,768

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-09-08

PRIOR FILING DATE: 2000-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-001-581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 5
US-09-949-001-581
                                                                                                                                                                                                                                                                                                                                                                          RESULT 6
US-09-949-016-162811/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 581, Application US/09949001

Sequence 581, Application US/09949001

Patent No. 6825336

GENERAL INFORMATION:
APPLICANT; VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH OSTEOPOROSIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL000789

CURRENT APPLICATION NUMBER: US/09/949,001

CURRENT FILING DATE: 2003-01-15
PRIOR APPLICATION NUMBER: 60/231,323
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 848
SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 8.9
Best Local Similarity 87.9
Matches 274; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2847 AAAAAAAAAAAA 2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2547 AAAATAGAATCATTAGGCCAGGCGTGGTGGCTCATGCTTGTAATCCCAGCACTTTGGTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122 AAAATAGCAAATTTTGGCCGGGCATGGTGGCTCACGCCTGTAGTCCCAGCACTTTGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTTCGAGTCCAGCCTGGCCAATATGCTGA 2666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAAAAAAAA 2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAAAAAAAAAA 69991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCAGGAAGGCAGAGGTTGCAC 2786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AACCCTGTCTCTACTAAAAATACAACAATTAGCTGGGCGTGGTGGCAGGTGCCTGTAATS 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AACCCTGTCTCTACTAAAATTACAAAAATTAGCCGGCCATGGTGGCAGGTGCTTGTAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCGAGGTGGGTCACCTGAGGTCAGGAGTTCGAGACCAGCCTGGTCAACATGGTGA 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAAAAAAAAAAA 434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGAGCCGAGATTGTGCCATTCCACTCCAGCCTGGGCAACAAGAGCGAAACTCTGTCTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCAGCTACTTGGGAGGCTGAGGCAGGGAATTGCTTGAACTCGGGAGGTGGAGGTTGCAG 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8.9%;
87.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 253; DB 3; Length 601; Pred. No. 5.6e-58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
```

```
S
                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
밁
                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-949-016-15964/c
; Sequence 15964, Application US/09949016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                              ; ORGANISM: Human
US-09-949-016-15964
                                                                                                                                                                                                                                                                                                               FILE REFERENCE: CL001307

CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT FILING DATE: 2000-04-14

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR FILING DATE: 2000-10-20

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-10-03

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR FILING DATE: 2000-09-08

PRIOR FILING DATE: 2000-09-08

NUMBER OF SEQ ID NOS: 207012
                                                                                                                                    Query Match 8.8%;
Best Local Similarity 85.4%;
Matches 280; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 162811
LENGTH: 601
                                                                                                                                                                                                                                                               SEQ ID NO 15964
LENGTH: 90618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 8.8
Best Local Similarity 83.9
Matches 284; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Human
-09-949-016-162811
                                                                                                                                                                                                                                                                                              SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                  TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
                                                                 72673 TTATAATTTGCATTAAAATGTTAAGTAACAGGCCGGGCGCGCGGTGGCTCATGCCTGTAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2520 TAAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100
                TGAAAATTTTCCTTTAAAATAGAATCATTAGGCCCAGGCGTGGTGGCTCATGCTTGTAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGGCACGGTGGCAGGCGCCTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGGCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCGAAACCAGCCTGGCCAACATGGTGAAAACCCCCGTCTCTACTAAAAATACAAAAATTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCGAGTCCAGCCTGGCCAATATGCTGAAAACCCCTGTCTCTACAAAATTACAAAAATTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGTGGGCRGATCACCTGAGGTCAGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTTGGGTGGATCACCTGAGGTCAGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCAGCACTTTGGGAGGCCAAGGCGGGTGGATCACCTGAGGTCAGGAGTTCGAGACCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTGAACCCGGGAGGCGGAGGTTGCAGTGAGCCGAGATTGTGCCATTGCACTCCAGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 83.5%;
                                                                                                                                    Score 252.4; DB 3; Length 90618; Pred. No. 8.2e-57; 1; Mismatches 47; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 252.8; DB 3; Pred. No. 6.3e-58; 2; Mismatches 54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ASSOCIATED OF DETECTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2579
                               2651
                                                                                                    2591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2699
72554
                                                                 72614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       281
                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
```

```
S
                                                                           밁
                                                                                                               ঠ
                                                                                                                                                         밁
                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                    片
                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: DNA
; ORGANISM: Human
US-09-949-016-70153
                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                   片
                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-949-016-70153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR PILING DATE: 2000-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 70153
LENGTH: 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES
FILE REFERENCE: CL001307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 70153, Application US/09949016 Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 282; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 8.8%;
Best Local Similarity 83.9%;
                                                                                                                                                                                                2698
                       2818 TGGGCAACAAGAGCAAAAACTCTGTCTGGAAAAAAAA 2853
                                                                                                                   2758
                                                                                                                                                                                                                                                                                                                                                                                                                          2518 AGTAAAATAAATGCTGAAAATTTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGC
                                                                                                                                                                                                                                                                              2638 GTTCGAGTCCAGCCTGGCCAATATGCTGAAACCCTGTCTCTACTAAAATTACAAAAATTA
                                                                                                                                                                                                                                                                                                                      142
                                                                             322
                                                                                                                                                         262
                                                                                                                                                                                                                                                                                                                                                                                                     82
                                                                                                    CACTTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCC
                                                                                                                                                           GCTGGGCGTGGTACGCGCCTGTATTACCAGCTACTCRGGAGGCTGAGGCAGGAGAAT
                                                                                                                                                                                    GCCGGCCATGGTGGCAGGTGCTTGTAATCCCCAGCTACTTGGGAGGCTGAGGCAGGAGAAT
                                                                                                                                                                                                                                      GTTCGAGACCTAGCCAACATGGTGAAAACCCCGTCTCTACTAAAAATACAAAAATTA
                                                                                                                                                                                                                                                                                                                      TCACGTCTGTAATCCCAGCACTTTGGGAGGCCGAGGCAGGTGGATCACCTGAGGTCAGGA
                                                                                                                                                                                                                                                                                                                                                              TCATGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAACTCTGTCTGGAAAAAAAAAAAAAAAAA 2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCAGGA 2771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGCCAATATGCTGAAACCCTGTCTCTACTAAAATTACAAAAATTAGCCGGCCATGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                     AGTAATTGCAGTAATTGCAGTTTTGCTATCAAAAGTAATGGCAAGGCCAGGCGTGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGACTCCATCTCAAAAAAAAAAAAAAAAA 72346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGGGCAACAAGAGC 2831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGGCGCCTGTAATCCCCAGCTACTCGGGAGGGCTAAGACAGGAGAATCGCTTGAACCTGGG
TGGGCAATAAGAGCAAAACTCTGTCTCAAAAAAATA 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 252; DB 3
Pred. No. 1e-57;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 3; Length 601;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             THEREOF
                                                                                                                                                                                                                                                                                                                                                              2637
                                                                                                                                                                                                2757
                                                                                                                                                                                                                                                                                2697
                                                                                                                                                                                                                                                                                                                                                                                                                                             2577
                                                                             381
                                                                                                                                                           321
                                                                                                                                                                                                                                          261
                                                                                                                                                                                                                                                                                                                        201
                                                                                                                                                                                                                                                                                                                                                                                                     141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             72434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             72494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                72374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
```

```
APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND

PILE REFERENCE: CL001307

CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT FILING DATE: 2000-04-14

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR FILING DATE: 2000-10-20

PRIOR FILING DATE: 2000-10-33

PRIOR FILING DATE: 2000-10-33

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR PILING DATE: 2000-09-08

1 PRIOR PILING DATE: 2000-09-08

1 PRIOR PILING DATE: 2000-09-08

2 PRIOR PILING DATE: 2000-09-08

3 PRIOR PILING DATE: 2000-09-08

3 PRIOR PRIOR PRIOR DATE: 2000-09-08

3 PRIOR DATE: 2000-09-08

4 PRIOR DATE: 2000-09-08

4 PRIOR DATE: 2000-09-08

5 PRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              १
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                श्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-949-016-16296/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-949-016-13807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Human
FEATURE:
NAME/KEY: misc_feature
LOCATION: (1)...(49301)
OTHER INFORMATION: n = A
75-09-949-016-16296
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT APPLICATION NUMBER: 60/241,755
PRIOR APPLICATION NUMBER: 60/231,768
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR APPLICATION NUMBER: 60/231,498
                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 13807, Application US/09949016
Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 16296, Application US/09949016 Patent No. 6812339 GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 284;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 49301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2520 TAAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCCACTGCACTCCAGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGGGCACGGTGGCAGGCGCCTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGGCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCGAAACCAGCCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCGAGTCCAGCCTGGCCAATATGCTGAAACCCTGTCTCTACTAAAATTACAAAAATTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGTGGGCAGATCACCTGAGGTCAGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTGAACCCGGGAGGCTGCAGTGAGCCGAGATTGTGCCATTGCACTCCAGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A, T, C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 251.6; DB Pred. No. 1e-56;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 49301;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AND USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        THERBOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
```

US-09-949-016-13615

ç

Q

Query Match

Best Local Similarity

8.7%;

Score Pred.

248; DB 3; No. 7.9e-56;

Length 33478,

```
PRIOR FILING DATE: 2000-09-08

NUMMBER OF SEQ ID NOS: 207012

SOFTMARE: FastSEQ for Windows Version 4.

SEQ ID NO 13807

LENGTH: 168971

TYPE: DNA

ORGANISM: Human

FEATURE:
NAME/KEY: misc feature
LOCATION: (1) ... (168971)

OTHER INFORMATION: n = A,T,C or G

US-09-949-016-13807
                                                                      US-09-949-016-13615/c
; Sequence 13615, Application
; Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                            श
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 282;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
ORGANISM: Human
FRATURE:
NAME/KEY: misc_feature
LOCATION: (1)...(33478)
OTHER INFORMATION: n = A,T,C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
                                                                                                                                                                                                                                                                                                                                                                                                                                  164383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         164323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   164263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             164203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    164143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              164083 AGTAATTGCAGTAATTGCAGTTTTGCTATCAAAAGTAATGGCAAGGCCAGGCGTGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2578 TCATGCTTGTAATCCCAGCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2518 AGTAAAATAAATGCTGAAAATTTTTCCTTTAAAATAGAATCATTAQGCCAQGCGTGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGGGCAACAAGAGCAAAACTCTGTCTGGAAAAAAAA 2853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CACTTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTGGGCGTGGTGGCACGCGCCTGTATTACCAGCTACTCAGGAGGCTGAGGCAGGAGAAT 164327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCGGCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGGCAATAAGAGCAAAACTCTGTCTCAAAAAAATA 164418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGCTTGAACCTGGGAGGCAGAGGTTGCAGTGAGCTGAGATCGTGCCATTGCACTCCAGCC 164382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTTCGAGACCAACCTGGCCAACATGGTGAAAACCCCCGTCTCTACTAAAAAATACAAAAATTA 164262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTTCGAGTCCAGCCTGGCCAATATGCTGAAAACCCTGTCTCTACTAAAATTACAAAAATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCACGTCTGTAATCCCAGCACTTTGGGAGGCCGAGGCAGGTGGATCACCTGAGGTCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   83.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8.8%;
                                                                                                                                                                                                                                                                                                                                                            US/09949016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 250.8; DB 3
Pred. No. 2.9e-56;
1; Mismatches 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          53;
                                                                                                                                                                                                                                                                                      ASSOCIATED
OF DETECTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 168971;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       164202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              164142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
```

Matches

272;

```
APPLICANT: FISCHER et al.

APPLICANT: FISCHER et al.

TITLE OF INVENTION: 123 Human Secreted Proteins

FILE REFERENCE: PZO10P2

CURRENT APPLICATION NUMBER: US/09/973,278

CURRENT APPLICATION NUMBER: 60/239,899

PRIOR FILING DATE: 1000-10-13

PRIOR APPLICATION NUMBER: 09/227,357

PRIOR APPLICATION NUMBER: 09/227,357

PRIOR APPLICATION NUMBER: 60/051,926

PRIOR FILING DATE: 1998-07-07

PRIOR APPLICATION NUMBER: 60/051,926

PRIOR APPLICATION NUMBER: 60/052,793

PRIOR APPLICATION NUMBER: 60/051,925

PRIOR APPLICATION NUMBER: 60/051,925

PRIOR FILING DATE: 1997-07-08

PRIOR APPLICATION NUMBER: 60/051,925

PRIOR APPLICATION NUMBER: 60/051,925

PRIOR APPLICATION NUMBER: 60/052,803

PRIOR APPLICATION NUMBER: 60/052,803

PRIOR APPLICATION NUMBER: 60/052,732

PRIOR APPLICATION NUMBER: 60/052,732

PRIOR APPLICATION NUMBER: 60/051,931

PRIOR APPLICATION NUMBER: 60/051,931

PRIOR APPLICATION NUMBER: 60/051,931

PRIOR APPLICATION NUMBER: 60/051,931

PRIOR APPLICATION NUMBER: 60/051,932

PRIOR APPLICATION NUMBER: 60/051,932

PRIOR APPLICATION NUMBER: 60/051,932

PRIOR APPLICATION NUMBER: 60/051,932

PRIOR APPLICATION NUMBER: 60/051,930

PRIOR APPLICATION NUMBER: 60/051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 12
US-09-973-278-900/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 900, Application US/09973278 Patent No. 6924354 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2606 GGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTTCGAGTCCAGCCTGGCCAATATGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2546 TAAAATAGAATCATTAGGCCAGGCGTGGTGGCTCATGCTTGTAATCCCAGCACTTTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAATAATAATA 6649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       АААЛАЛАААААА 2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCAGGAAGGCAGAGGTTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAACCCTGTCTCTACTAAAATTACAAAAATTAGCCGGCCATGGTGGTGGTGCTTGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TAAAATAAATAATAAGGCCGGGTGTGGTGGCTCATGCCTGTAATCCCAGCACTTTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGTGCCAAGATTGCACCACTGCACTCCAGCCTGGGCAACAAGAGCGAAACTCTGTCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAACCCTGTCTCTAATAAAAAATACAAAAATTAGCCGGGTGTGGTGGCACATGCCTGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCTGAGGCGGGTGGATCACCTGAGGTCAGGAGTTTGAGACCAGCCTGACTAACATGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
RESULT 13
US-09-949-016-11754
                                                                                                                                                 S
                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-973-278-900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 9
SEQ ID NO 900
SEQ ID NO 900
LENGTH: 8259
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 276;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1997-09
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/051,928
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/055,722
FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,723
                                                                                                    6526
                                                                                                                                                                                                                                                      2775
                                                                                                                                                                                                                                                                                                         6646
                                                                                                                                                                                                                                                                                                                                                                                                        6706
                                                                                                                                                                                                                                                                                                                                                                                                                                                           2655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/058,660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1997-09-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/058,664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/058,785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/055,984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/055,684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/056,360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/055,964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/055,947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/055,950 FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/055,953 FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/055,949 FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2595 GCACTTTGGTAGGCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTTCGAGTCCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2535 AAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTGGTGGTCATGCTTGTAATCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                     CCAATATGCTGAAACCCTGTCTCTACTAAAATTTACAAAAATTTAGCCGGCCATGGTGGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAACTTCCTTGTAAATAAGAATCAGGCAGGCCAGGTGTGGTGGCTCATGCCTGTAATCCCA
                                                                                                    ACTTCGTCTCAAAAAAAAAAAAAAA 6502
                                                                                                                                    ACTCTGTCTGGAAAAAAAAAAAAA 2859
                                                                                                                                                                                                    TAGAGGTTACAGTAAGCTGAGATCGTGCCATT
                                                                                                                                                                                                                                                 CAGAGGTTGCACTGAGATTGTGCCACTGCACTCCAGCCTGGGCAACAAGAGCAAA
                                                                                                                                                                                                                                                                                                      GCGCCTGTAATCCAAGCCACTCGGGAGGCTGAGGCAGGAGAATCGTT
                                                                                                                                                                                                                                                                                                                                                        GTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCAGGAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCACTTTGGGAGGCTGAGGCAGGCAGATCACCTGAGGTCAGGAGTTCAAGACCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                        CCAACATGGAGAAACCCCCGTCTCTACTAAAAATACAAAAATTAGCCAGGCATGGTGGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1997-09-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/058,661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/055,954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 247.8; DB 3
Pred. No. 4.7e-56;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 8259;
                                                                                                                                                                                                                                                                                                         TGAACCCGGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
```

2834 6527

6587 2774 2714

6707 2654 6767

6647

2594

0

8 뭉 5 밁 S 뭉 8 밁 S 밁

> 6842 2666

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ક
                                                                                                                                                                                                                                                                                                    US-09-750-580-1/c
                                                                                                                                                                                                                                                                                                                         RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; NAME/KEY: misc_feature
; LOCATION: (1) ... (75394)
; OTHER INFORMATION: n = A,T,C or
US-09-949-016-11754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 11754, Application US/09949016

Patent No. 6812339

GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 11754
LENGTH: 75394
TYPE: DNA
ORGANISM: Human
FEATURE:
                                                                                                                                                                                                                                                           Sequence 1, Application US/09750580 Patent No. 6455280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 8.6
Best Local Similarity 86.6
Matches 271, Conservative
                                                        APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                          GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INHIBITING NEOPLASTIC CELL GROWTH FILE REFERENCE: 89.US2.CIP CURRENT APPLICATION NUMBER: US/09/750,580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/231,498 PRIOR FILING DATE: 2000-09-08
                                                                                                                                                                                                                                                                                                                                                                                    68628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               68508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              68448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              68388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2547 AAAATAGAATCATTAGGCCAGGCGTGGTGGCTCATGCTTATCCCCAGCACTTTGGTAG
                                                                                                                                                                                                                                          INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                    AAAAATAAAAAGA 68640
                                                                                                                                                                                                                                                                                                                                                                                                                          AAAAAAAAAAAA 2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGAGCCGAGATTGTGCCATTGCACTCCAGCCTGGGCAACAAAAGTGAAACTCTGTCTCAA 68627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCAGCTACTTGGGAGGCTGAGGTAGGAGATCACTTGAACCCCCAGAGGTGGAGGTTGCAA 68567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCAGCTACTTGGGAGGCTGAGGCAGGAGGAGTCACTTGAACCAGGAAGGCAGAGGTTGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACCCCATCTCTACTAAAAGTACAAAAATTAGCCGGGCATGGTGGCAGGTGCCTGTAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AACCCTGTCTCTACTAAAATTACAAAATTAGCCGGCCATGGTGGCAGGTGCTTGTAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTGAGGTGGGTGGATCACCTGAGGTCAGGACTTTGAGACCAGCCTGGCCAAAATGGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTTCGAGTCCAGCCTGGCCAATATGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATAAGTAAAGAATAGGCCAGGCGTGGTTGCTCAGGCCTGTAATCCCCAGCAATTTAGGAG
                                                      Bougueleret, Lydie
Ebbets-Reed, Dana
Salter-Cid, Luisa
                                                                                                                 Bihain, Bernard
Dumas Milne Edwards,
Duclert, Aymeric
                                                                                                                                                                               Bour, Barbara
                                                                                                                                                                                                  Yen, Frances
Denison, Blake
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Mismatches 41; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 247; DB 3; Length 75394; Pred. No. 2.1e-55;
                                                                                                                                          Jean-Baptiste
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           68387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              68507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              68447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

```
SOFTWARE: Pate
SEQ ID NO 1
LENGTH: 81001
                                                                                               NAME/KEY: allele
LOCATION: 77058
CITHER INFORMATION: 20-853-415
NAME/KEY: primer bind
LOCATION: 929.949
CITHER INFORMATION: 20-828.pu
NAME/KEY: primer bind
LOCATION: 1357..1377
CITHER INFORMATION: 20-828.rp
CITHER INFORMATION: 20-828.rp
COTHER INFORMATION: 17-82.pu
NAME/KEY: primer bind
LOCATION: 12029..12050
CITHER INFORMATION: 17-42.pu
NAME/KEY: primer_bind
LOCATION: 12581..12603
COTHER INFORMATION: 17-42.rp
COMMITTER INFORMATION: 17-42.rp
COMMITTER INFORMATION: 17-42.rp
COMMITTER INFORMATION: 17-42.rp
COMMITTER INFORMATION: 17-42.rp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: 20-828-311
NAME/KEY: Allele
LOCATION: 12347
OTHER INFORMATION: 17-42-319
NAME/KEY: Allele
LOCATION: 15241
OTHER INFORMATION: 17-42-319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 60/113,686
PRIOR FILING DATE: 1998-12-22
PRIOR APPLICATION NUMBER: US 60/141,032
PRIOR FILING DATE: 1999-06-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: PCT/IB00/0101
PRIOR FILING DATE: 2000-06-21
PRIOR APPLICATION NUMBER: PCT/IB99/02058
PRIOR FILING DATE: 1999-12-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 49/469/099
PRIOR FILING DATE: 1999-12-21
PRIOR APPLICATION NUMBER: US 60/113,686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 2000-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT FILING DATE:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: 17-41-250
NAME/KEY: allele
LOCATION: 42218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: misc feature
LOCATION: 15969..17969
OTHER INFORMATION: 3'regulatory region
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: exon NAME/KEY: exon LOCATION: 13641..13752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: exon NAME/KEY: exon LOCATION: 13470...13526
                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: allele
LOCATION: 45442
OTHER INFORMATION: 20-842-115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: exon NAME/KEY: exon LOCATION: 14271...15968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Homo sapiens
                                          OTHER INFORMATION: 17-41.pu
                                                            NAME/KEY: primer_bind
LOCATION: 14992..15012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: 20-841-149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: 12947..12958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent.pm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000-06-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-828-311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000-12-28
BER: US 09/599,362
                                                                                                        complement
                                                                                                                                                                                                                                     complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     : polymorphic base C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           polymorphic base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         polymorphic base
                                                                                                                                                                                                                                                                                                                                                                                                                            polymorphic base A or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              polymorphic base A or
                                                                                                                                                                                                                                                                                                                                                               polymorphic base C or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            မ္ပ
```

```
OTHER INFORMATION: 20-853.pu

NAME/KEY: primer_bind
LOCATION: 77166.77185

OTHER INFORMATION: 20-853.rp

NAME/KEY: primer_bind
LOCATION: 1220..1238
                                                                                                                                                                                                                                                                  OTHER INFORMATION: 20-828-311.probe
NAME/KEY: misc binding
LOCATION: 12335..12359
OTHER INFORMATION: 17-42-319.probe
                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: 20-853-415.mis
NAME/KEY: primer bind
LOCATION: 77059.77077
OTHER INFORMATION: 20-853-415.mis complement
NAME/KEY: misc binding
LOCATION: 1227.1251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: 17-41-250.mis
NAME/KEY: primer bind
LOCATION: 15242...15260
OTHER INFORMATION: 17-41-250.mis
NAME/KEY: primer bind
LOCATION: 42199..42217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: 20-828-311.mis

NAME/KEY: primer bind
LOCATION: 1240..1258
OTHER INFORMATION: 20-828-311.mis complement

NAME/KEY: primer bind
LOCATION: 12328..12346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: 20-842.pu
NAME/KEY: primer_bind
LOCATION: 45863...45883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: 20-841.rp
NAME/KEY: primer_bind
LOCATION: 45328..45347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: primer_bind
LOCATION: 42070..4209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: 20-842-115.mis
NAME/KEY: primer_bind
LOCATION: 45443.45461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: 20-841-149.mis complement NAME/KEY: primer_bind LOCATION: 45423..45441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: 20-841-149.mis
NAME/KEY: primer_bind
LOCATION: 42219. 42237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: primer_bind
LOCATION: 76644..76664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: primer_bind
LOCATION: 42572..4259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION:
                       NAME/KEY: misc I
                                                                    OTHER INFORMATION:
                                                                                       NAME/KEY: misc_binding
LOCATION: 45430..45454
                                                                                                                                       OTHER INFORMATION: 20-841-149.probe
                                                                                                                                                          NAME/KEY: misc_binding LOCATION: 42206..42230
                                                                                                                                                                                                       OTHER INFORMATION: 17-41-250.probe
                                                                                                                                                                                                                               NAME/KEY: misc_binding LOCATION: 15229..15253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: primer bind LOCATION: 77039.77057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: 20-842-115.mis complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: primer_bind
LOCATION: 15222..15240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: 17-42-319.mis complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: 17-42-319.mis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION: 17-41.rp complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       primer_bind
12348..12366
                       binding 6..77070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .42591
20-853-415.probe
                                                                  20-842-115 probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-842.rp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-841.pu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               complement
```

```
RESULT 15
US-09-949-016-186635/c
"-"" once 186635, Application US/09949016
                                                           Ś
                                                                                               밁
                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
 ş
                                밁
                                                                                                                            Ś
                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                               ; ORGANISM: Human
US-09-949-016-186635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-750-580-1
                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
SEQ ID NO 186635
                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: VENTER, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 271;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHIENS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/231,498 PRIOR FILING DATE: 2000-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 2000-10-03
                                                                                                                                                                                                                                                                                                                               TYPE: DNA
                                                                                                                                                                                                                                                                                                                                               LENGTH: 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                64871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 64931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                64991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   65051 ÁTAAGGAAATTGTGTGGCCAGGTGCAGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2607
                                                                2633
                                                                                                                                 2573
                                                                                                                                                                                        2513 CTGGTAGTAAAATAAATGCTGAAAATTTTCCTTTAAAATAGAATCATTAGGCCAGGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2547 AAAATAGAATCATTAGGCCAGGCGTGGTGGCTCATGCTTGTAATCCCCAGCACTTTGGTAG
2693 AATTAGCCGGCCATGGTGGCAGGTGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGG 2752
                                                                                                                                                                369
                                                                                                 309
                                                                                                                                                                                                                               282;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCAAGGTGGGTGGATCACCTGAGGTCAGGAGTTCGAGACCAGCCTGGCCAACATGGTGA
                                                                CAGGAGTTCGAGTCCAGCCTGGCCAATATGCTGAAAACCCTGTCTCTACTAAAATTACAAA 2692
                                                                                                                     GTGGCTCATGCTTGTAATCCCCAGCACTTTGGTAGGCTGAGGTTGGGTGGATCACCTGAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AACCCTGTCTACTAAAATTACAAAAATTAGCCGGCCATGGTGGCAGGTGCTTGTAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTGAGGTRGGTGGATCACCTGAGGTCAGGAGTTCGAGTCCAGCCTGGCCAATATGCTGA
                                                                                                                                                                CTGGAGCTACCACACTTACCAAACAATTACTAATGACCTAAGAAATGTTGGCCGGGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAAAAAAACAAA 64739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ААААААААААА 2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NACCCCGTCTCTATTAMAATACAAAATTAGCCGGGCATGGTGGCAGGAGCCTGTAATC
                                                                                                   GTGGCTCAYGCCTGTAATCCCAGCACTTTGGGAGGCCAAGGCGGGTGGATCACCTGGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGAGCTGAGATTGCGCCACTGCACTCCAGCCTGAGGGACAAGAGCGAGACTCTGTATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCAGCTACTCAGGAGGCTGAGGCAGGAGAATCACTTGAACCCGGGAGGCGGAGGTTGCAG
                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                               for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                86.6%;
                                                                                                                                                                                                                                                                                                                                                                                                    207012
                                                                                                                                                                                                                                               81.7%;
                                                                                                                                                                                                                               ?
                                                                                                                                                                                                                            Score 246.6; DB 3;
Pred. No. 2.9e-56;
2; Mismatches 61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 247; DB 3;
Pred. No. 2.2e-55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 81001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                601;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                               0
                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                   190
                                                                                                   250
                                                                                                                                 2632
                                                                                                                                                                  310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  64812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                64932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2666
                                                                                                                                                                                                 2572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    64752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 64872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   64992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2606
                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
```

Search Job ti	ğ	ş	DЬ	ş	Db
Search completed: October 14, 2006, 17:27:56 Job time : 521 secs	69 CAGCCTGGGCAACAAGAGCGAAACTCCATCTCAAAAAAAA	2813 CAGCCTGGGCAACAAGAGCAAAACTCTGTCTGGAAAAAAAA	129 AGAATCACTTGAACCTGGGAGGCCAGAGGTTGCAGTGAGCCGAGATCGCACCACTGCACTC 70	2753 AGAATCACTTGAACCAGGAAGGCAGAGGTTGCACTGAGCTGAGATTGTGCCACTGCACTC 2812	

```
Command line parameters:

-MODEL=frame+_p2n.model -DEV=xlh
-Q=/abss/ABSSWEB_spool/US10667289/runat_13102006_111541_24520/app_query.fasta_1
-Q=/abss/ABSSWEB_spool/US10667289/runat_13102006_111541_24520/app_query.fasta_1
-DB=Published_Applications_NA_Main -QFMT=fastap -SUFFIX=p2n.rnpbm
-MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1
-MATRIX=blosum62 -TRANS=human40.cdi -LIST=45 -DOCALICN=200 -THR_SCORE=pct
-THR_MAX=100 -THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext
-HARPSIZE=500 -MINLEN=0 -MAXLEN=200000000 -HOST=abss03h
-USER=US10667289 @CGN 1 1 1675 @runat_13102006_111541_24520 -NCPU=6 -ICPU=3
-NO_MMAP -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV_TIMEOUT=120
-WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOEXT=7
-YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Minimum
Maximum
                                                                                             Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OM protein - nucleic search, using frame_plus_p2n model
                                                                ŏ.
                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B B
                                                             Score
      3324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    seq length:
seq length:
                                                                                                                                                                                                                                                                                                                        Published Applications NA Main:*

1: /EMC_Celerra_SIDSJ/ptodata/2/pubpna/US07_PUBCOMB.seq:*
2: /EMC_Celerra_SIDSJ/ptodata/2/pubpna/US08_PUBCOMB.seq:*
3: /EMC_Celerra_SIDSJ/ptodata/2/pubpna/US09A_PUBCOMB.seq:*
4: /EMC_Celerra_SIDSJ/ptodata/2/pubpna/US09A_PUBCOMB.seq:*
5: /EMC_Celerra_SIDSJ/ptodata/2/pubpna/US09C_PUBCOMB.seq:*
6: /EMC_Celerra_SIDSJ/ptodata/2/pubpna/US10A_PUBCOMB.seq:*
7: /EMC_Celerra_SIDSJ/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
7: /EMC_Celerra_SIDSJ/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
8: /EMC_Celerra_SIDSJ/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
9: /EMC_Celerra_SIDSJ/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
10: /EMC_Celerra_SIDSJ/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
11: /EMC_Celerra_SIDSJ/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
12: /EMC_Celerra_SIDSJ/ptodata/2/pubpna/US11A_PUBCOMB.seq:*
13: /EMC_Celerra_SIDSJ/ptodata/2/pubpna/US11B_PUBCOMB.seq:*
14: /EMC_Celerra_SIDSJ/ptodata/2/pubpna/US11B_PUBCOMB.seq:*
15: /EMC_Celerra_SIDSJ/ptodata/2/pubpna/US11B_PUBCOMB.seq:*
16: /EMC_Celerra_SIDSJ/ptodata/2/pubpna/US11B_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Xgapop 10.0 , Ygapop 10.0 , Fgapop 6.0 , Delop 6.0 , I
                                                         Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-667-289-2
3326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    October 14, 2006, 14:40:43; Search time 1964 Seconds (without alignments) 5902.945 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18892170 seqs, 6143817638 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BLOSUM62
      99.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MNXVTIQWDAVIALYILFSW.....TYFPQNILESHFNRISLLEK 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000000000
   2859 3 US-09-853-180-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GenCore version 5.1.9 (c) 1993 - 2006 Biocceleration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Xgapext
Ygapext
Fgapext
Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7.0
                                                         Description
Sequence 1, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-853-180-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              O O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  O O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/09853180 Publication No. US20030017617A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Chirica, Madaline
APPLICANT: Parham, Christi L.
```

```
2 3324 99.9 2859 9 US-10-797-157-5
3 324 99.9 2859 10 US-10-760-11 Sequence 1, Appli 4 3324 99.9 2859 10 US-10-667-289-1
5 3324 99.9 2859 10 US-10-667-289-1
6 3314 99.6 1890 3 US-09-972-708-19 Sequence 20, Appli 3314 99.6 1890 3 US-09-972-708-20 Sequence 20, Appli 3314 99.6 2830 3 US-09-972-708-29 Sequence 20, Appli 3314 99.6 2830 3 US-09-972-708-29 Sequence 22, Appli 2952 88.8 1698 8 US-10-115-667-29 Sequence 22, Appli 2952 88.8 1698 8 US-10-115-667-29 Sequence 23, Appli 2952 88.6 1935 3 US-09-972-708-29 Sequence 24, Appli 2280.5 68.6 1935 3 US-09-972-708-29 Sequence 29, Appli 2280.5 68.6 1935 3 US-01-015-330-3 Sequence 24, Appli 2280.5 68.6 1935 3 US-01-015-330-3 Sequence 24, Appli 2280.5 1152 13 US-11-016-106-1 Sequence 24, Appli 2280.5 10.1 637 6 US-10-027-633-210413 Sequence 24, Appli 2280.5 10.1 637 6 US-10-027-633-210413 Sequence 24, Appli 2280.5 10.1 637 6 US-10-027-633-210413 Sequence 29, Appli 2280.5 10.1 637 6 US-10-027-633-210413 Sequence 29, Appli 2280.5 68.8 1293 10 US-10-750-163-99162 Sequence 29, Appli 2280.5 68.8 1293 10 US-10-750-633-99162 Sequence 20, Appli 2280.5 68.8 1293 10 US-10-750-633-99162 Sequence 20, Appli 2280.5 68.8 1293 10 US-10-750-633-99162 Sequence 17, Appli 2280.5 68.8 1280.5 68.6 1280.5 68.6 1
```

ALIGNMENTS

```
APPLICANT: Kastelein, Robert A.
APPLICANT: MOOTE, Kevin W.
TITLE OF INVENTION: Mammalian Receptor Proteins; Related Reagents and Methods.
FILE REFERENCE: DX01074
FILE REFERENCE: DX01075-10
CURRENT APPLICATION NUMBER: US/09/853,180
CURRENT FILING DATE: 2001-05-10
PRIOR APPLICATION NUMBER: 60/203,426
PRIOR FILING DATE: 2000-05-10
NUMBER OF SEQ ID NOS: 5
SOFTWARE: Patentin version 3.1
SEQ ID NO 1
LENGTH: 2859
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (119)..(2005)
```

Db 299 CCANGRAIACTTCAITTTTTATALAIATTCACATCAATCACAAGATT 358 81 ASMILYSTHTTHTATALAIATTCACATCAATCACAAGATT 358 91 ARMACCACAGTCATCACTTTTTTTTATALAIATTCACATCAATCACTACTACTAC 418 155 ARMACCACAGTCATCACTTTTTTTTATALACTACTACTACTACTAC 418 160 CYSTHALAGIUCYSPYCLYSHISPHSGINGIUTHTLEUIICCYSGIYLYSASDIISSET 120 170 CYSTHALAGIUCYSPYCLYSHISPHSGINGIUTHTLEUIICCYSGIYLYSASDIISSET 120 181 TGCACTGCTGATTCCCCAACATTTTCAAGAACACTGATTCTTGCAAACACATTTCAAGACC 171 SETGIYTYPFOFOASDIISPYCASDGIUVAITHCYSVAILISTYCIUTYTSSETGIY 140 172 TGCAGATATTCCACACATTATTCCAAGAACATTATTATGAATATCAGCC 181 ASMSETTHCYSTRTTPASAACATTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	US-09-853-180-1 Alignment Scores: Pred. No.: Score: Score: Score: Percent Similarity: 100.0\$ Matches: 629 Percent Similarity: 100.0\$ Mismatches: 0 Query Match: DB: US-10-667-289-2 (1-629) x US-09-853-180-1 (1-2859) Qy 1 MetAsn***ValThrileGlnTrpAspAlaValIleAlaLeuTyrIleLeuPheSerTrp 20

Qy 201 AlaLeuGlyMetGluGluSerLy8GlnLeuGlnIleHi8LeuA8pA8pIleValIlePro 220 	Qy 181 IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn 200	Qy 161 HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrTleAsn 180	Qy 141 ABIMELTHICYSTHITIPASINALA***LYSLEUTHITYIILEASPTHILYSTYIVALVAL 160	Qy 121 SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly 140	Qy 101 CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer 120	Qy 81 AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr 100	Qy 61 ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle 80	Qy 41 IlePheLyBMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLyBAsnCysGln 60	Qy 21 CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr 40	Oy 1 MetAgn***ValThrileGlnTrpAgpAlaVallleAlaLeuTyrIleLeuPheSerTrp 20	·667-289-2 (1-629) x US-10-797-157-5 (1-2859)	Similarity: 100.0% Mismatches: h: 99.9% Indels: 9	0 Length: 3324.00 Matches: 100.0% Conservative:	; NAME/AS: Mat Deptice ; LOCATION: (188)(2005) US-10-797-157-5	NAME/KEY: CD LOCATION: (1) FEATURE:	INGTH: INGTH: INGANISM	; PRIOR FILING DATE: 2003-03-10 ; NUMBER OF SEQ ID NOS: 11 ; SOFTWARE: PatentIn version 3.2 ; SEO ID NO 5	; CURRENT APPLICATION NUMBER: US/10/797,157 ; CURRENT FILING DATE: 2004-03-09 ; PRIOR APPLICATION NUMBER: U.S. 60/453,672	; APPLICANT: McClanahan, Terrill K. ; TITLE OF INVENTION: USES OF IL-23 AGONISTS AND ANTAGONISTS; RELATED REAGENTS ; FILE REFERENCE: DX06022US01
B &) B &	? B \$	S B 5	?	D 5) B &	, B &) B 4	S & S	, B &	₽	Q !	B &	DB QV	B 8	B &	B &	ρb	Q B
1799 CCTGACATACAAAACTCAGTGAGAAGGAAAACCACCATGCTTTTGGAAAATGATTCACCC 1858	SEARMINI		л ⊢ и	ABRITH-C1YTY-LYBF-CGIRT1GSerAshPheLeuDr-CGIRG1YSerHisLeuSerAshPheLeuDr-CGIRG1YSerHisLeuSerAshPheLeuDr-CGIRG1YSerHisLeuSerAshPheLeuDr-CGIRG1YSerHisLeuSerAshPheLeuDr-CGIRG1G1AGGAAGCCATCTCAGCCAAATTTCTGCCTGAGGGAAGCCATCTCAGCCAAACTCTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCCAAACTCTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCCAAATTTCTGCCTGAGGGAAGCCATCTCAGCCAAATTTCTGCCTGAGGGAAGCCATCTCAGCCAAATTTCTGCCTGAGGGAAGCCATCTCAGCCAAATTTCTGCCTGAGGGAAGCCATCTCAGCCAAATTTCTGCCTGAGGGAAGCCATCTCAGCCAAATTTCTGCCTGAGGGAAGCCATCTCAGCCAAATTTCTGCCTGAGGGAAGCCATCTCAGCCAAATTTCTGCCTGAGGGAAGCCATCTCAGCCAAATTTCTGCCTGAGGGAAGCCATCTCAGCCAAATTTCTGCCTGAGGGAAGCCATCTCAGCCAAATTTCTGCCTGAGGGAAGCCATCTCAGCCAAATTTCTGCCTGAGGGAAGCCATCTCAGCCAAATTTCTGCCTGAGGGAAGCCATCTCAGCCAAATTTCTGCCTGAGGGAAGCCATCTCAGCCAAATTTCTGCTGAGGAAAGCCATCTCAGCCAAATTTCTGCCTGAGGGAAAGCCATCTCAGCCAAATTTCTGCTGAGGAAAGCCAATCTCAGCCAAATTTCTGCCTGAGGGAAAGCCAATCTCAGCCAAATTTCTGCCTGAGGGAAAGCCAATCTCAGCCAAATTTCTGCTGAGGAAAGCCAATCTCAGCCAAATTTCTGCTGAGGAAAGCCAATCTCAGCCAAATTTCTGCTGAGGAAAGCCAATCTCAGCCAAATTTCTGCTGAGGAAAGCCAATCTCAGCCAAATTTCTGCTGAGGGAAAGCCAATCTCAGCCAAATTTCTGCTGAGGAAAGCCAATCTCAGCCAAATTTCTGCTGAGGAAAGCCAATCTCAGCCAAATTTCTGCTGAGGAAAGCCAATCTAGAATTTCTGCTGAGGAAAGCCAATCTAGAAATTTCTGCTGAGGAAAATTTCTGAGAAATTTCTGAGAAATTTCTGAGAAATTTCTGAGAAATTTCTGAGAAATTTCTGAGAAATTTCTGAGAAATTTCTGAGAAATTTTCTGCTGAGGAAAATTTTCTGAGAAATTTTCTGAGAAATTTTCTGAGAAATTTTCTGAGAAATTTTCTGAGAAATTTTCTGAGAAATTTTCTGAAATTTTCTGAGAAATTTTCTGAGAAATTTTTCTGAAATTTTTCTGAAATTTTTTTT	ALGABLY FILESTING DEFINE CONTROL OF THE CONTROL OF	PRELIEPTOGIUMIBUS BEFOINTABBLYFLY SUSUL WASHING LY PEOLEGUCUU IIIII	ASTABLES ESTABLIS INVALUEUTY (**ALABET COMETITE INCLULIE LA SENTINGE LA STABLE (**ASTABLE LA SENTINGE		381 ArgingtylelyshrgArgiteLeuleulterrolystrpleutytchuAsplie 400 1818	11eValPheAlaValMetLeuSerIeLeuSerIeU11eG1y11ePheAsnazgserPhe	39 ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG 1	IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet	321 GlnValThrSerLygAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer 340 	301 LysargTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro 320 	281 GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly 300 	261 ThrasnGlnThrTrpAsnValLysGluPheAspThrasnPheThrTyrValGlnGlnSer 280 	241 TYTITDABDSETGITITITITITITITITITITITITITITITITITITI		719 GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT 778 221 SeralaalavalileSerargAlaGluThrileAsnAlaThrValProLysThrileIle 240

AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr 10 	Qy 41 IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln 60	Qy 21 CysHisGlyGlyTleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr 40	-10-667-289-2 (1-629) x US-10-720-026-1 (1-2859) 1 MetAsn***ValThrIleGlnTrpAspAlaVallleAlaLeuTyrIleLeuPheSerTrp	ry Match: 99.9% Indels: 99.9% Gaps:	0 3324.00 100.0*	ON: (188	NAME/KEY: CDS LOCATION: (119)(2005) FEATURE: NAME/KEY: mat partide	LENGTH: TYPE: DN ORGANISM	PRIOR FILING DATE: 2000-05-10 PRIOR FILING DATE: 2000-05-10 NUMBER OF SEQ ID NOS: 6 SOPTWARE: Patentin version 3.2 SEQ ID NO 1	FILE REFERENCE: DX010481K 100/1026 FILE REFERENCE: DX010481K 109/10/720,026 CURRENT APPLICATION NUMBER: US/10/720,026 CURRENT FILING DATE: 2003-11-21 PDIOS PROFICATION NUMBER: 06/203 426	APPLICANT: Mastelein, Robert A. APPLICANT: Moore, Kevin W. TITLE OE TUVENTION. Mostelein Boosto Buttoin Bolated Bosset and Bolated Bosset and Bosset Bottoin Boosto Bottoin Bolated Bosset Bottoin B	; Sequence 1, Application US/10720026 ; Publication No. US20040258686A1 ; GENERAL INFORMATION: ; APPLICANT: Chirica Madaline	DD 1979 TYCAATAGGATTYCACTCTTGGAAAAG 2005 RESULT 3 US-10-720-026-1	621 PheAsnArgIleSerLeuLeuGluLys	1919 GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTTGGAAAGCCAC	Db 1859 AGTGAAACTATTCCAGAACAGACCTGCTTCCTGATGAATTGTCTCCTGTTTGGGGATC 1918 Qy 601 ValAsmGluGluLeuProSerIleAsmThrTyrPheProGlnAsmIleLeuGluSerHis 620	Qy 581 SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle 600
Q D QY	D Q D Q	Db Qy	Q dd	B &	Q	B &	B 8	p 29	D 9	B 8	유 <i>청</i>	D Q	B &	g 9	Q	용 &	дь
441 PheIleProGluHisLysProThrAspTyrLysLysGluAsmThrGlyProLeuGluThr 460	401 ProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerCluLeuMetAsn 420	381 ArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIle 400 	361 IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe 380	341 IleserThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet 360 	321 GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer 340	301 LysargTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro 320	281 GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly 300 	261 ThrasnGlnThrTrpAsnValLysGluPheAspThrasnPheThrTyrValGlnGlnSer 280	241 TyrTypaspSerGlnThrThrIleGluLysVslSerCysGluMetArgTyrLysAlaThr 260	221 SeralaalavalileSerargalaGluThrIleAsnalaThrValProLysThrIleIle 240	201 AlaLeuGlyMetGluGluSerLyBGlnLeuGlnIleHisLeuAspAspIleValIlePro 220 	181 IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn 200 	161 HISVALLYSSETLENGINVINTGLIGINGINGINVINTYTUSUVINTSETSSTIYTISASN 180 [539 ALI III III III III III III III III III	141 AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal 160	121 SerGlyTyrProProAspTleProAspGluValThrCysVallleTyrGluTyrSerGly 140	

```
RESULT 4
US-10-667-289-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
PEATURE:

NAME/KEY: CDS
LOCATION: (119)..(2005)
FEATURE:
NAME/KEY: misc feature
LOCATION: (127)..(127)
OTHER INFORMATION: k means g or t/u. S
OTHER INFORMATION: coriginally filed.
FEATURE:
NAME/KEY: mat_peptide
LOCATION: (188)..(2005)
FEATURE:
NAME/KEY: misc_feature
LOCATION: (563)..(563)
OTHER INFORMATION: r means g or a. See
OTHER INFORMATION: originally filed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1, Application US/10667289 Publication No. US20050100917A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                            SOFTWARE: PatentIn version 3.2
SEQ ID NO 1
LENGTH: 2859
                                                                                                                                                                                                                                                                                                    APPLICANT: Chirica, Madaline
APPLICANT: Parham, Christi L.
APPLICANT: Kastelein, Robert A.
APPLICANT: Moore, Kevin W.
TITLE OF INVENTION: Mammalian Receptor Proteins; Related Reagents and I TITLE OF INVENTION: Mammalian Receptor Proteins; Related Reagents and I CURRENT APPLICATION NUMBER: US/10/667,289
CURRENT FILING DATE: 2003-09-18
PRIOR APPLICATION NUMBER: US/09/853,180
PRIOR FILING DATE: 2001-05-10
PRIOR APPLICATION NUMBER: 60/203,426
PRIOR FILING DATE: 2000-05-10
NUMBER OF SEQ ID NOS: 4
                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PheAsnArgIleSerLeuLeuGluLys 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAATGAGGÁGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerGluThrIleProGluGlnThrLeuLeuProABpGluPheValSerCysLeuGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ProAspIleGlnAsnSerValGluGluGluThrThrMetLeuLeuGluAsnAspSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGTGTGAATTCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSerGlyAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACACTGGATATAAACCCCAAATTTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySerHisLeuSerAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATTCCTGATCTC
                   See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2005
                                                                                                                                 See page 12, line 34, of patent application
                 page
                    12,
                    line
                   36,
                    of.
                    patent
                   application
                                                                                                                                                                                                                                                                                                                                                                                                                          Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       500
                    86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
DB:
     ঠ
                                문
                                                        S
                                                                                         밁
                                                                                                               S
                                                                                                                                               밁
                                                                                                                                                                       $
                                                                                                                                                                                                      밁
                                                                                                                                                                                                                            ક
                                                                                                                                                                                                                                                               뭥
                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-667-289-2 (1-629)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-667-289-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Мо.:
                                                                                                                                                839
                                                                                                                                                                                                         779
       301
                                   959
                                                             281
                                                                                           899
                                                                                                                    261
                                                                                                                                                                           241
                                                                                                                                                                                                                                  221
                                                                                                                                                                                                                                                                719
                                                                                                                                                                                                                                                                                           201
                                                                                                                                                                                                                                                                                                                       659
                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                599
                                                                                                                                                                                                                                                                                                                                                                                                           161
                                                                                                                                                                                                                                                                                                                                                                                                                                         539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             41 IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ASDMETTHICYSTHITTPASDALA***LYSLEUTHITYILEASPTHILYSTYIVALVALUAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProargLysLeuHisPheTyrLysAsmGlyIleLysGluargPheGlnIleThrArgIle
     {\tt LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro}
                                                  GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly
                                                                                                         ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                                                  TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                                                                                                                                                                                       TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                         SerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle
                                                                                                                                                                                                                                                                               AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValIlePro
                                                                                                                                                                                                                                                                                                                                        IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                              HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer 120
                                                                                                                                                  TATTGGGATAGTCAAACAACAATTGAAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                  GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTTTTAAGATGGGTATGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                                           ACAMACCAMACTTGGAATGTTAMAGAATTTGACACCAATTTTACATATGTGCMACAGTCA
                                                                                                                                                                                                                                                                                                                                                                               CATGTGAAGAGTTTAGAGACAGAAGAAGAAGAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3324.00
100.0%
100.0%
99.9%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      x US-10-667-289-1 (1-2859)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2859
629
0
                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 178
          320
                                     1018
                                                              300
                                                                                            958
                                                                                                                                                   898
                                                                                                                                                                              260
                                                                                                                                                                                                         838
                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                             220
                                                                                                                                                                                                                                                                                                                                                    200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 298
                                                                                                                                                                                                                                                                  778
                                                                                                                                                                                                                                                                                                                         718
                                                                                                                                                                                                                                                                                                                                                                                  658
                                                                                                                                                                                                                                                                                                                                                                                                                                          598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          238
```

```
ð B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ 🔓 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            र्
                                      RESULT 5
US-10-667-290-1
                                                                     음 성 음
                                                                                                                         중 유
                                                                                                                                                               ક
                                                                                                                                                                                  문
                                                                                                                                                                                                        8 8 8
                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                     ঠ 🖁 ঠ
                                                                                                                                                                                                                                                                                                                                                     8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                 문
Sequence 1, Application US/10667290
Publication No. US20050109918A1
GENERAL INFORMATION:
APPLICANT: Chirica, Madaline
                                                                                                                                                                                                                                                                       1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1019
                                                                                                                                                                                                                                                                                                                1619
                                                                                                                                                                                                                                                                                                                                                                                             1499
                                                                                                                                                                                                                                                                                                                                                                                                                                     1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1079
                                                                                                             1919
                                                                                                                                                                                          1799
                                                                                                                                                                                                                                                                                                                                                        1559
                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                  501
                                                                                                                                                                                                                                                                                                                                                                                                                 461
                                                                                                                                                                                                                                                                                                                                                                                                                                                       441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                    PheAsnArgIleSerLeuLeuGluLys
                                                                                                                      ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                                                                                                                                          ProAspIleGlnAsnSerValGluGluGluThrThrMetLeuLeuGluAsnAspSerPro
                                                                                                                                                                                                                                             SerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSerSer
                                                                                                                                                                                                                                                                                                               ATTATGABATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT
                                                                                                                                                                                                                                                                                                                           AsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSerGlyAsn
                                                                                                                                                                                                                                                                                                                                                                 ABNThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySerHisLeuSerAsn
                                                                                                                                                                                                                                                                                                                                                                                                       ArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                              PheIleProGluHisLysProThrAspTyrLysLysGluAsnThrGlyProLeuGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGGTCACATCAAAAGCATTCCAACATGACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCAC
                                                                                                                                                               SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                                                                                                                                                                                                           AsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSerLeu
                                                                                                                                                                                                                                                                                                                                                                                             AGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATTTCCTGATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGGAGATACAGGACCCCTGGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                     AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC
                                                                                                                                                                                                                                  AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                     2005
                                                                                        629
                                                                                                            1978
                                                                                                                                                                                                                                                                          1738
                                                                                                                                                                                                                                                                                                                                                                                                                                     1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1078
                                                                                                                                                     1918
                                                                                                                                                                                           1858
                                                                                                                                                                                                              580
                                                                                                                                                                                                                                  1798
                                                                                                                                                                                                                                                      560
                                                                                                                                                                                                                                                                                                               1678
                                                                                                                                                                                                                                                                                                                                    520
                                                                                                                                                                                                                                                                                                                                                        1618
                                                                                                                                                                                                                                                                                                                                                                                             1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                 620
                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                           500
                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                         460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    380
                         S
                                                                 S
                                                                                        밁
                                                                                                       ð
                                                                                                                              밁
                                                                                                                                               5
                                                                                                                                                                                     ঠ
                                                                                                                                                                                                              뭥
                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                Query Match:
DB:
            밁
                                            g
                                                                                                                                                                     밁
                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Homo :
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                 Х
О.:
                                                  419
                                                                                         359
                                                                                                                                 299
                                                                                                                                                                       239
                                                                                                                                                                                                               179
                                                                                                                                                                                                                                                      119
                               121
                                                                     101
                                                                                                                                                                                          41
                                                                                                            81
                                                                                                                                                    51
                                                                                                                                                                                                                                                                        μ
```

```
NAME/KEY: misc_feature; LOCATION: (563)..(563); OTHER INFORMATION: r means g or a.; OTHER INFORMATION: originally filed. US-10-667-290-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-667-289-2 (1-629) x US-10-667-290-1 (1-2859)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 2000-05-10
NUMBER OF SEQ ID NOS: 4
SOFTWARE: PatentIn version 3.2
SEQ ID NO 1
LENGTH: 2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KBY: CDS
LOCATION: (119)..(2005)
FEATURE:
NAME/KBY: misc_feature
LOCATION: (127)..(127)
OTHER INFORMATION: k means g or
OTHER INFORMATION: originally fi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/10/667,290 CURRENT FILING DATE: 2003-09-18 PRIOR APPLICATION NUMBER: US/09/853,180B PRIOR FILING DATE: 2001-05-10 PRIOR APPLICATION NUMBER: 60/203,426 PRIOR FILING THE PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Parham, Christi L.
APPLICANT: Kastelein, Robert A.
APPLICANT: Moore, Kevin W.
TITLE OF INVENTION: Mammalian Receptor Proteins; Related Reagents and Methods.
FILE REFERENCE: DX01074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: mat_peptide
LOCATION: (188)..(2005)
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21 CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                                                                                                                                                                                                            PTOATGLYSLEUHİSPheTYTLYSASNGIYIleLYSGlUATGPheGlnIleThTATGIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MetAsn***ValThrIleGinTrpAspAlaValIleAlaLeuTyrIleLeuPheSerTrp
SerGlyTyrProProAspIleProAspGluValThrCysVallleTyrGluTyrSerGly
                                                                                                                                     CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                                                                                                  AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                            TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                      AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
3324.00
100.0%
100.0%
99.9%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g or t/u.
lly filed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             See page 12, line 36, of patent application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    page 12,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
0
0
0
0
0
0
0
0
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       line
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       o
Fin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    patent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    application
                                                                                                    478
                                                                                                                                                                       120
                                                                                                                                                                                                                                             418
                                                                                                                                                                                                                                                                                                                    100
                                                                                                                                                                                                                                                                                                                                                                                       358
                                                                                                                                                                                                                                                                                                                                                                                                                                                             80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
```

S

뭐

B 8 B 8 B 8 B

```
1079
                                                                                                                                                                 1439
                                                                                                                                                                                                                                  1379
                                                                                                                                                                                                                                                                                                    1319
                                                                                                                                                                                                                                                                                                                                                                    1259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1019
                                                                                                                                                                                                                                                                                                                                                                                                                                    1199
                                                                                                                                                                                                 441
                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                  381
                                                                                                                                                                                                                                                                                                                                   401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             161
 AsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSerGlyAsn
                                                  AsnThrGlyTyrLygProGlnIleSerAsnPheLeuProGluGlySerHisLeuSerAsn
                                                                                                                    ArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAspLeu
                                                                                                                                                                                  PheIleProGluHisLysProThrAspTyrLysLysGluAsnThrGlyProLeuGluThr
                                                                                                                                                                                                                                                     AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle
                                                                                                                                                                                                                                                                                                  CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                                                                                                                                                                                    ProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsn
                                                                                                                                                                                                                                                                                                                                                                                     ArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                    IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAAGGTACTGGCAGCCTTGGAGTTCACCGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerAlaAlaValIleSerArgAlaGluThrIleAgnAlaThrValProLygThrIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValIlePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal
                                                                                                  AGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTC
                                                                                                                                                                                                                                 AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                                                                                                                                    CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCTCTACAGGGCACCTTACTTCTGACAACAGAGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATGTGAAGAGTTTAGAGACAGAAGAAGAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AACATGACTTGCACCTGGAATGCTRGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                  1558
                                                                                                                                                                  1498
                                                                                                                                                                                                                                  1438
                                                                                                                                                                                                                                                                                                    1378
                                                                                                                                                                                                                                                                                                                                                                 1318
                                                                                                                                                                                                                                                                                                                                                                                                                                    1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1018
                                  1618
                                                                 500
                                                                                                                                   480
                                                                                                                                                                                                 460
                                                                                                                                                                                                                                                                   440
                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                   400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             658
                                                          δ
                                                                                                  밁
                                                                                                                         8
                                                                                                                                                             밁
S
                               밁
                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
```

8

유

멍 δ 뮍 ર્ક 뮹 ð 밁 Ś 밁 ঠ B ঠ 밁 ð 밁 S 밁 8

음 성 음 성 음

```
GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Immunex Corporation

APPLICANT: Cosman, David J.

APPLICANT: Mosley, Bruce A.

APPLICANT: Bird, Timothy A.

APPLICANT: Wiley, Steven R.

APPLICANT: Wiley, Steven R.

TITLE OF INVENTION: HEMATOPOIETIN RECEPTORS HPR1 AND HPR2

FILE REFERENCE: 3160-B

CURRENT APPLICATION NUMBER: US/09/972,708

CURRENT APPLICATION NUMBER: US/09/972,708

CURRENT FILING DATE: 2001-10-05

NUMBER OF SEQ ID NOS: 29

SOFTWARE: PatentIn version 3.1

SEQ ID NO 20

LENGTH: 1890

TYPE: DNA

ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 6
US-09-972-708-20
                                                                                                                                                                                                                                                                      US-10-667-289-2 (1-629) x US-09-972-708-20 (1-1890)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-972-708-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20, Application US/09972708 Publication No. US20030059871A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                      121
                                                                         41
                                                                                                                 61
  13
                                                                                                                                                      21
                                                            IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
                                                                                                                                      CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                               ATGAATCAGGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG
                                                                                                                                                                                                                 PheAsnArgIleSerLeuLeuGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProAspIleGlnAsnSerValGluGluGluThrThrMetLeuLeuGluAsnAspSerPro 580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSerSer 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT 1678
ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                   TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSerLeu 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCAC 1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTTGGAAAATGATTCACCC 1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGTGTGAATTCACTA 1738
                                                                                                                                                                                                                                                                                                            0
3314.00
99.5%
99.5%
99.6%
                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2005
                                                                                                                                                                                                                                                                                                            1890
626
0
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1798
    80
                                                                           60
                                                                                                                   120
                                                                                                                                                        40
                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1918
```

401 ProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsn 420	81 ARINGANACH COLORITO CHITTANALANTICOLACANCH COLANGANTI 240 81 ARINGATH TANALANCH COLORITO CHITTANALANTICOLACANCH COLORITO CHITTANALANCH
Alignment Scores: Pred. No.: Score: Score: Percent Similarity: 99.5% Best Local Similarity: 99.5% Mismatches: Query Match: 99.6% Indels: 0	41 Phailercolusisis Promission Control Phaepyring Systuam Thockon Andronama Management 1320 42 Argaphyr Proginiams Series Phaephen Phaephen Production Control 1320 43 Argaphyr Proginiams Series Phaephen Phaephen Production Control 1320 44 Argaphyr Proginiams Series Phaephen Phaephen Production Control 1320 45 Argaphyr Proginiams Series Phaephen Phaephen Production Control 1320 46 Argaphyr Proginiams Series Phaephen Phaephen Production Control 1320 47 Asia Andronama Andronama Phaephen Proginial Series Phaephen 1320 48 Andronama Phaephen Proginiams Series Phaephen Phaephen Proginial Individual 1320 49 Asia Andronama Phaephen Proginial Series Phaephen Phaephen Proginial Individual 1320 40 Andronama Phaephen Proginial Individual Individual Individual 1320 41 Andronama Phaephen Individual Proginial Individual

400

1320

420 1260 1140

1080

```
δ
                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                         ঠ
                                                                       밁
                                                                                        S
                                                                                                                당
                                                                                                                                      8
                                                                                                                                                               문
                                                                                                                                                                                        S
                                                                                                                                                                                                                       뭐
                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-667-289-2 (1-629) x US-10-715-667-20 (1-1890)
                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
 341
                        961
                                                                                               301
                                                                                                                        841
                                                                                                                                                 281
                                                                                                                                                                        781
                                                                                                                                                                                               261
                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                221
                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                   201
                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet 360
                                      GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer
                                                                                        LysArgTyrTxpGlnProTxpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                       ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTvrValGlnGlnSer
                                                                                                                                                                                                                                      TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                                                                                                                                                                                                                                                                       SerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle
                                                                                                                                                                                                                                                                                                                          GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                                                                                                                                                                                                       AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValIlePro
                                                                                                                                                                                                                                                                                                                                                                          ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                       IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                             CATGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                          HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CysThralaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ARTAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProArgLy8LeuHisPheTyrLy8AsmGlyIleLy8GluArgPheGlnIleThrArgIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGAATCAGGTCACTATTCAATGGGATGCAGTAATAGCCCTTTACATACTCTTCAGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MetAsn***ValThrIleGlnTrpAspAlaValIleAlaLeuTyrIleLeuPheSerTrp
                         CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                           AAAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                         ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                           TATTGGGATAGTCAAACAACAATTGAAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                          TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                         1020
                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        40
                                                 340
                                                                           960
                                                                                                 320
                                                                                                                         900
                                                                                                                                                                                                 280
                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                  260
                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                          660
                                                                                                                                                                                                                                                                                                                                                   220
                                                                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                                                                                    200
                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80
                                                                                                           US-10-105-930-9
(S-10-105-930-9
; Sequence 9, Application US/10105930
; Publication No. US20030009018A1
; GENERAL INFORMATION:
                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
APPLICANT: Maeda, Masatsugu
APPLICANT: Yaguchi, No. US20030009018Aliko
TITLE OF INVENTION: NOVEL HEMOPOIETIN RECEPTOR
FILE REFERENCE: 06501-105US1
CURRENT APPLICATION NUMBER: US/10/105,930
CURRENT FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER: PCT/JP00/06654
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: JP 2000-240397
                                                                                                                                                                                                                                                                                                                                       1681
                                                                                                                                                                                                                                                                                                                                                                                       1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1021
                                                                                                                                                                                                                                       1801
                                                                                                                                                                                                                                                                                      1741
                                                                                                                                                                                                                                                                                                                                                                                                                                       1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1081
                                                                                                                                                                                      1861
                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                              621
                                                                                                                                                                                                                                                                                                               581
                                                                                                                                                                                                                                                                                                                                                               561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ArgThrGlyIleLy8ArgArgIleLeuLeuIleProLy8TrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTCAATAGGATTTCACTCTTGGAAAAG
                                                                                                                                                                                                    PheAsnArgIleSerLeuLeuGluLys
                                                                                                                                                                                                                                                    ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                                                                                                                                                                                                                                                   SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                                                                                                                                                                                                                                                                    ProAspIleGlnAsnSerValGluGluGluThrThrMetLeuLeuGluAsnAspSerPro
                                                                                                                                                                                                                                                                                                                                                                                                       SerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGGAATACAGGACCCCCTGGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PheIleProGluHisLysProThrAspTyrLysLysGluAsnThrGlyProLeuGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCGTCTTTGCTGTTATGTTGAATTCTTTCTTTGATTGGGATATTTAACAGATCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                                                                                                                                                                                                                                       CCTGACATACAAAACTCAGTAGAGGAAGGAAACCACCATGCTTTTGGAAAAATGATTCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                         AATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTTCTGTTTTCAAGTGTGAATTCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                       AsnProArgLeuGlnLysH1gProAsnPheAlaPheSerValSerSerValAsnSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                                                       AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                         AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                                                                                629
                                                                                                                                                                                         1887
                                                                            PROTEIN, NR12
```

1800

1860

1620 560 1680 580 1560

540

```
; PRIOR FILING DATE: 2000-08-03
; PRIOR APPLICATION NUMBER: JP 11-273358
; PRIOR FILING DATE: 1999-09-27
; NUMBER OF SEQ ID NOS: 77
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 9
; LENCTH: 1910
; TYPE: DNA
; TYPE: DNA
; FRATURE:
; NAME/KEY: CDS
; LOCATION: (1)...(1887)
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                  밁
                              ð
                                               밁
                                                                 중 음 중
                                                                                                                    밁
                                                                                                                                    8 8 8
                                                                                                                                                                                         음 성 음
                                                                                                                                                                                                                                           श्च
                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                  र्
                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                         $
                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-667-289-2 (1-629) x US-10-105-930-9 (1-1910)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-105-930-9
                                  221
                                                                                       541
                                                                                                        181
                                                                                                                          481
                                                                                                                                          161
                                                                                                                                                             421
                                                                                                                                                                             141
                                                                                                                                                                                               361
                                                                                                                                                                                                                121
                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                        121
                                                                     201
                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                         41
                                                                                                                                                                                                                                                                                                                                                                           61
                                                    AlaLeuGlyMetGluGluSerLy8GlnLeuGlnIleHisLeuAspAspIleValIlePro
                                                                                       AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal
                                                                                                                                                                                                        SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly
                                                                                                                                                                                                                                         CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                                                                                                                    ProarglysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                                                                                                                                                                                                                                       Cy8Hi BGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                            TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                            SerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle
                                                                                                                                                                                                                                 TGCACTGCTGAATGTCCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                    AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                             AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
3314.00
99.5%
99.5%
99.6%
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                             160
                                                                                                                                                                                               420
                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                       80
                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                            40
                                   240
                                                     660
                                                                     220
                                                                                                        200
                                                                                                                          540
                                                                                                                                           180
                                                                                                                                                             480
                                                                                                                                                                                                                140
                                                                                                                                                                                                                                                                                                     240
                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                    음 성 음
                                                                                                                                                                                                                  중 유
                                                                                                                                                                                                                                                      ঠ 🔓 ঠ
                                                                                                                                                                                                                                                                                                        음 경
                                                                                                                                                                                                                                                                                                                                          유성
                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                               · 왕
                                                                                                                                                                                                                                                                                                                                                                                                                                중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
         ঠ
                          밁
                                     ঠ
                                                         음 성
                                                                                          유 성
                                                                                                                              유정
                                                                                                                                                                                                       1441
                                                                                                                                                                                                                                                                                                                                                  1201
                                                                                                                                                                                                                                         1381
                                                                                                                                                                                                                                                                            1321
                                                                                                                                                                                                                                                                                                               1261
                                                                                                                                                                                                                                                                                                                                                                                    1141
                                                                                                                                                                                                                                                                                                                                                                                                                      1081
                           1741
                                                                                                                                                                     1501
                                                             1681
                                                                                                1621
                                                                                                                541
                                                                                                                                  1561
                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1021
                                                                                                                                                                                       501
                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                           461
                                                                                                                                                                                                                                                                                             441
                                                                                                                                                                                                                                                                                                                                                                 401
                                                                                                                                                                                                                                                                                                                                                                                                    381
                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          321
           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                          SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                                                                                                                       IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                        IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                             SerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSerSer
                                                                                                                                            AsnProArgLeuGlnLysHisProAsnPheAlaPheSerVal8erSerValAsnSerLeu
                                                                                                                                                                              AsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSerGlyAsn
                                                                                                                                                                                                                                                    ArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAspLeu
                                                                                                                                                                                                                                                                                                                                                                                             ArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                 AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                     AATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT
                                                                                                                                                                                                                                          AGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTCCTGATCTC
                                                                                                                                                                                                                                                                                                                                                                                     CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                                                                                                                                                                                                                                                                                                                                     ATCGTCTTTGCTGTTATGTTGTCAATTCTTTTGATTGGGATATTTAACAGATCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1080
                                                               1740
                                                                                                                                     1620
                                                                                                                                                                                                         1500
                                                                                                                                                                                                                                           1440
                                                                                                                                                                                                                                                                             1380
                                                                                                                                                                                                                                                                                                               1320
                                                                                                                                                                                                                                                                                                                                                  1260
                                                                                                                                                                                                                                                                                                                                                                                     1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1020
                                                                                                  1680
                                                                                                                                                                       1560
                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                 440
                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      780
```

Qy 141 AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal 160	Qy 121 SerGlyTyrProProAspIleProAspGluValThrCysVallleTyrGluTyrSerGly 140 	Oy 101 CysThrAlagluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer 120	Qy 81 AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr 100	Qy 61 ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle 80	QY 41 IlePheLysMetGlyMetAsnTleSerTleTyrCysGlnAlaAlaIleLysAsnCysGln 60	Qy 21 CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr 40	1 MetAsn***ValThrIleGlnTrpAspAl	99.6% Indels: 3 Gaps: 3 YUS-09-972-708-19 (1-2830)	Alignment Scores: Pred. No.: 0 Score: 3314.00 Matches: 626 Percent Similarity: 99.5* Rest focal cimilarity: 09.5* Rest focal cimilarity: 09.5* Rest focal cimilarity: 09.5*		SOFTMARE: PATENTIN VERBION 3.1 SEQ ID NO 19 LENGTH: 2830	FILE REFERENCE: 3160-B CURRENT APPLICATION NUMBER: US/09/972,708 CURRENT FILING DATE: 2001-10-05	Bird, T DuBose, Wiley,		RESULT 9 US-09-972-708-19 ; Sequence 19, Application US/09972708 : bublication No. US2003005987111	Qy 621 PheAsnArgIleSerLeuLeuGluLys 629	Db 1801 GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTTGGAAAGCCAC 1860
Db Qy	ያ ያ ያ	S B 5) B &	B &) B &	da Qy	Qy Db	B &	B &	유 왕	Å Å	ት	<u> </u>	g Qy	B &	g Qy	da
ARTAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT 1 ABNProArgLeuGlnLy8HisProAsnPheAlaPheSerValSerSerValAsnSerLeu 5	Self AsharanglulleThrSerLeuThrLeuLyseProProValAspSerLeuAspSerGlyAsn 520	Argabby Friod nathber Leveneaghaning in Value (1981) 11 11 11 11 11 11 11 11 11 11 11 11 1	PheIIerroGluHisLyeProThrAspTyrLysLysGluAsmThrGlyProLeuGluThr 4	ASTABINETSETJUGINVALLEUTYTVALASPETJORELIETTIGITTELTE 4	ProAsmMettysAsmSerAsmWallVallysMetLeuGlnGluAsmSerGluLeuWetAsm 	Arginadiyilelysargargilelellellellellelrerriplellysgilaspile	IlevalPheAlavalMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe	341 IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet 360 	321 GlnValThrSerLygAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer 340 	301 LygargTyrTrpGlnProTrpSerSerProPhePheHisLygThrProGluThrValPro 320 	281 GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly 300 	261 ThrasnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer 280 	241 TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr 260 	221 SeralaalaVallleSerargalaGluThrIleAgnalaThrValProLygThrIleIle 240 	201 AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValllePro 220 	181 IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn 200 	•

RESULT 10 OY 621 PheAsnArgIleSerLeuLeuGlüLys 629	1907 GTGAATGAGGAGTTGCCATCTAATAATA	Db 1847 AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC 1906 Qy 601 ValAsnGluGuLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis 620	Db 1787 CCTGACATACAAAACTCAGTAGAGGAGGAAAACCACCATGCTTTTGGAAAAATGATTCACCC 1846 Oy 581 SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle 600	561	541 SeråsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSerSer	
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	δ β	ş	용 왕	<u> </u>	B &	₹ B
647 AICTCIALTIGATTACHAGINGCANGANGTICTIGGTTCGGTCCANGCANGANC 706 201 AlaLeudlyMetGludluserLysdinLeudinTleHisLeuAspAspIleValIlePro 220 201 AlaLeudlyMetGludluserLysdinLeudinTleHisLeuAspAspIleValIlePro 220 201 [161 HisValLysSerLeuGluThrGluGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn 180	141 ASDMetThrCySThrTrpAspAla***LysLeuThrTyrIleAspThrLysTyrValVal 160 		TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAAGACATTTCT	

```
APPLICANT: Maeda, Masatsugu

APPLICANT: Yaguchi, No. US20030009018A1iko

TITLE OF INVENTION: NOVEL HEMOPOIETIN RECEPTOR PRO'

FILE REFERENCE: 06501-105US1

CURRENT APPLICATION NUMBER: US/10/105,930

CURRENT FILING DATE: 2002-03-25

PRIOR APPLICATION NUMBER: PCT/JP00/06654

PRIOR FILING DATE: 2000-09-27

PRIOR FILING DATE: 2000-08-03

PRIOR APPLICATION NUMBER: JP 11-273358

PRIOR APPLICATION NUMBER: JP 11-273358

PRIOR FILING DATE: 2000-08-03

PRIOR FILING DATE: 1099-09-27

NUMBER OF SEQ ID NOS: 77

SOFTMARE: FastSEQ for Windows Version 4.0

SEQ ID NO 5

LENGTH: 2123

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:
NAMEKEY: CDS
LOCATION: (98)...(1984)

US-10-105-930-5
 Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                          . . . . . . . . . . . . . . . . . . .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                        RESULT 11
US-10-105-930-5
                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                           श्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                   Sequence 5, Application US/10105930 Publication No. US20030009018A1 GENERAL INFORMATION:
                                                           No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                  621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                          PheAsnArgIleSerLeuLeuGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ValasnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSerGlyAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProAspIleGlnAsnSerValGluGluGluThrThrMetLeuLeuGluAsnAspSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTCAAGTGTGAATTCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACACTGGATATAAACCCCCAAATTTCCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySerHisLeuSerAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACA 1486
0
3292.00
99.2%
98.9%
99.0%
Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                           1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                  629
                                                                                                                                                                                                                                                                                                                     PROTEIN, NR12
2123
622
5
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  . 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뮍
            ð
                                    밁
                                                     δ
                                                                                문
                                                                                                5
                                                                                                                       밁
                                                                                                                                              δ
                                                                                                                                                                    음 성
                                                                                                                                                                                                                  뫄
                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                           닭
                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                            뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-667-289-2 (1-629) x US-10-105-930-5 (1-2123)
                                     1058
              341
                                                          321
                                                                                 998
                                                                                                       301
                                                                                                                              938
                                                                                                                                                     281
                                                                                                                                                                             878
                                                                                                                                                                                                 261
                                                                                                                                                                                                                        818
                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                       758
                                                                                                                                                                                                                                                                                             221
                                                                                                                                                                                                                                                                                                                     869
                                                                                                                                                                                                                                                                                                                                           201
                                                                                                                                                                                                                                                                                                                                                                  638
                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                578
                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                             518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98
 IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet
                                    ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                                                                                                          SerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle
                                                                                                                                                                                                                                                                                                                                                                               IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                               CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ASBLYSTHITHIALAAIGLEUTIPTYILYSASBPHELEUGLUPIOHISALASEIMELTYI 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MetAsn***ValThrileGlnTrpAspAlaValIleAlaLeuTyrIleLeuPheSerTrp
                                                                                                                              GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                          GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly
                                                                                                                                                                                                                                                                                                                                  AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValIlePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle 80
                                                                                                                                                                                                                                                                       TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                    GCACTAGGCATGGAAGAGTCAAAACTACTGCAAATTCACCTGGATGATATAGTGATACTT
                                                                                                                                                                                                                                                                                                                                                                  ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                               AACATGACTTGCACCTGGAATGCTGGGAGGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTTTTAAGATGGGTGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGAATCAGGTCACTATTCAATGGGATGCAGTAATAGCCCCTTTACATACTCTTCAGCTGG
                                                           340
                                                                                    1057
                                                                                                                                                                                                                                                  260
               360
                                                                                                                                 997
                                                                                                                                                                              937
                                                                                                                                                                                                                                                                                                                                             220
                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                                                                                                                                                                                           877
                                                                                                                                                                                                                                                                        817
                                                                                                                                                                                                                                                                                                                                                                   697
                                                                                                                                                                                                                                                                                                                                                                                         200
                                                                                                                                                                                                                                                                                                                                                                                                                  637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                217
                                                                                                                                                                                                                                                                                                                     757
```

```
US-09-972-708-22

US-09-972-708-22

Sequence 22, Application US/09972708

Publication No. US20030059871A1

GENERAL INFORMATION:

APPLICANT: Inmunex Corporation

APPLICANT: Cosman, David J.

APPLICANT: Mosley, Bruce A.

APPLICANT: DuBose, Robert F.

APPLICANT: Wiley, Steven R.

TITLE OF INVENTION: HEMATOPOIETIN RECEPTORS HPI

FILE REFERSNCE: 3160-B

CURRENT APPLICATION NUMBER: US/09/972,708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ち 음 ち
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                  ठ है ठ
                                                                                                                                                                                                                                                      8 8 8 8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                           음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                  음 성 음
                                                                                                                                                                                                                           1838
                                                                                                                                                                                                                                                             1778
                                                                                                                                                                                                                                                                                                1718
                                                                                                                                                                                                                                                                                                                                    1658
                                                                                                                                                                                                                                                                                                                                                                       1598
                                                                                                                                                                                                                                                                                                                                                                                                            1538
                                                                                                                                                                                                                                                                                                                                                                                                                                                1478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 381
                                                                                                                                                                   621
                                                                                                                                                                                                        109
                                                                                                                                                                                                                                          581
                                                                                                                                                                                                                                                                                                                                                     521
                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      441
                                                                                                                                                                                                                         SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                                                                                                                                                                             SerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSerSer
                                                                                                                                                                                                                                                                                                                                    AsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSerGlyAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PheIleProGluHisLysProThrAspTyrLysLysGluAsnThrGlyProLeuGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ArgThrGlyIleLy8ArgArgIleLeuLeuLeuIleProLy8TrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAATGAGGAGTTGCCATCTATTAATACTTATTTTCCACAAAATATTTTGGAAAGCCAC
                                                                                                                                                                                                ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                    AsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySerHisLeuSerAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGAACTGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                            PheAsnArgIleSerLeuLeuGluLys
                                                                                                                                                                                                                                                                                                 AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                        AATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                             AACACTGGATATAAACCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGTAAT
                                                                                                                                                                   629
                               HPR1
                               AND
                                                                                                                                                                                                        620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1237
                                                                                                                                                                                      1957
                                                                                                                                                                                                                                                                                                 1777
                                                                                                                                                                                                                                                                                                                                     1717
                                                                                                                                                                                                                                                                                                                                                                        1657
                                                                                                                                                                                                                                                                                                                                                                                                             1597
                                                                                                                                                                                                                                                                                                                                                                                                                                                1537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1297
                                                                                                                                                                                                                           1897
                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                             1837
                                                                                                                                                                                                                                                                              580
                                                                                                                                                                                                                                                                                                                  560
                                                                                                                                                                                                                                                                                                                                                                                                                              500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 400
                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3
; SEQ ID NO 22
; LENGTH: 1698
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-972-708-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score:
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                       유 성
                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                        ક
                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
   유
                                                  S
                                                                    밁
                                                                                     중 유
                                                                                                                          S
                                                                                                                                                 밁
                                                                                                                                                             ક
                                                                                                                                                                                문
                                                                                                                                                                                                   5
                                                                                                                                                                                                                         음 성
                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                ર્
                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-667-289-2 (1-629) x US-09-972-708-22 (1-1698)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores: Pred. No.:
                               밁
                                                      241
                                                                                                                                                                                                                                         141
                                                                          661
                                                                                            221
                                                                                                             601
                                                                                                                               201
                                                                                                                                                  541
                                                                                                                                                                    181
                                                                                                                                                                                      481
                                                                                                                                                                                                        161
                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                                                                                                     241
                    261
                                      721
                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                             121
  781
                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                         19
                                                                                                                                                                                                                                                                                                                                                                                                                              4
                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABRLYSThrThrAlBArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
  CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                                                                                                                                                                                       ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                                                                                                                                                                                                                                                                                                            CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                       AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValllePro
                                                                                                                                                           IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                                                                                                 HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                                                                                                                                                     AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                               GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                  ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                       CATGTGAAGAGTTTAGAGACAGAAGAAGAAGAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                          AACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                 TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
2952.00
89.3%
89.3%
88.8%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1698
562
0
64
     840
                                                                                                               660
                                                                                                                                 220
                                                                                                                                                    600
                                                                                                                                                                     200
                                                                                                                                                                                       540
                                                                                                                                                                                                         180
                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                              160
                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                140
                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                        100
                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                           80
                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                        780
                                                                            720
                                                                                            240
```

음 성 음

841

```
PheAsnArgIleSerLeuLeuGluLys 629
                                                                                 ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                                                                    SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                                                                                                          ProAspIleGlnAsnSerValGluGluGluThrThrMetLeuLeuGluAsnAspSerPro
                                                                                                                                                                                                                                AATCCCAGGTTACAAAAGCATCCTAATTTTGCTTTTTCTGTTTTCAAGTGTGAATTCACTA
                                                                                                                                                                                                                                                                                                   AsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                PheIleProGluHisLysProThrAspTyrLysLysGluAsnThrGlyProLeuGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTAATATGAAAAACAGCAATGTTGTGAAAATGCTACAGGAAAATAGTGAACTTATGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTGACATACAAAACTCAGTAGAGGAGGAAACCACCATGCTTTTGGAAAATGATTCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTCATCCCAGAACACAAGCCTACAGACTACAAGAAGGAGAATACAGGACCCCTGGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ---ACAGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuGlyMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer
              1695
                                                                                                                       1608
                                                                                                                                                                            1548
                                                                                                                                                                                                                                                                                      1428
                                                                                                                                                                                                                                                                                                                                                                                                                            500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                            620
                                                                                                                                                                                                                                  1488
                                                                                                                                                                                                                                                           560
                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                            1368
                                                                                                                                                                                                                                                                                                                                                                                                  1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1008
                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                       520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 22, Application US/10715667

Publication No. US20040152161A1

GENERAL INFORMATION:

APPLICANT: Inmunex Corporation

APPLICANT: Cosman, David J.

APPLICANT: Mosley, Bruce A.

APPLICANT: Bird, Timothy A.

APPLICANT: Wiley, Steven R.

APPLICANT: Wiley, Steven R.

TITLE OF INVENTION: HEMATOPOIETIN RECEPTORS HPF

FILE REFERENCE: 3160-B

CURRENT APPLICATION NUMBER: US/10/715,667

CURRENT APPLICATION NUMBER: US/09/972,708

PRIOR APPLICATION UNMBER: US/09/972,708

PRIOR APPLICATION NUMBER: US/09/972,708

PRIOR PILING DATE: 2001-10-05

NUMBER OF SEQ ID NOS: 29

SOFTWARE: Patentin version 3.1

SEQ ID NO 22

LENGTH: 1698

TYPE: DNA

ORGANISM: Homo sapiens

US-10-715-667-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                당. 왕
                                                                                            밁
                                                                                                              Ś
                                                                                                                                            밁
                                                                                                                                                                      5
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-667-289-2 (1-629) x US-10-715-667-22 (1-1698)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 13
US-10-715-667-22
                                                                                                                                                                         121
                                                                                                                                                                                                       301
                                                                  161
                                                                                            421
                                                                                                                       141
                                                                                                                                                  361
                                                                                                                                                                                                                               101
                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                   181
               181
                                         481
                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                  41
                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                          21 CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                         HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                             AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal
                                                                                                                                                 CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                                                                           ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                                                                                                                                                                                                                                                                                      IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
                                                                                                                                                                                                        TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                 TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                            AACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
2952.00
89.3%
89.3%
88.8%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HPR1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AND
                                          540
                                                                    180
                                                                                               480
                                                                                                                          160
                                                                                                                                                  420
                                                                                                                                                                             140
                                                                                                                                                                                                         360
                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                         100
                                                                                                                                                                                                                                                                                                                                               80
                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                    240
```

1549

ঠ

유 성 유

음 성 음 성

1369

1309

1429

Ś

481

음 성 음

В

1249

5

441

1129

밁

1069

중 유

421

1009

8 8 8 8 8 8 8 8 8

401

1608

600

620

1548

```
1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                      461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
SeräbnThrIlePheLeuGlyGluLeuSerLeuIleLeuäbnGlnGlyGluCy8SerSer 560
                                                                                                                                                                                                                                                                                                                                                          ArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ArgThrGlyIleLysArgArgIleLeuLeuLeulleProLysTrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerAlaAlaVallleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlaLeuGlyMetGluGluSerLy8GlnLeuGlnIleHiBLeuASpAspIleValllePro
                                                                                     ---ACAGGGATTAAAAGAAGGATCTTATTGTTAATACCAAAGTGGCTTTATGAAGATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuGlyMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TATTGGGATAGTCAAACAACAATTGAAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                   AsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSerGlyAsn
                                                                                                                                                                                                                                                                      AACACTGGATATAAACCCCAAATTTCAAATTTTCTGCCTGAGGGAAGCCATCTCAGCAAT
                                                                                                                                                                                                                                                                                                AsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySerHisLeuSerAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                                                                              AATAATGAAATTACTTCCTTAACACTTAAACCACCAGTTGATTCCTTAGACTCAGGAAAT
1488
                                                                                        1428
                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                500
                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  400
                                                                                                                                                                              1368
                                                                                                                                                                                                                                                                      1308
                                                                                                                                                                                                                                                                                                                                                            1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                          520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 29, Application US/09972708

| Publication No. US20030059871A1
| GENERAL INFORMATION:
| APPLICANT: Immunex Corporation |
| APPLICANT: Immunex Corporation |
| APPLICANT: Mosley, Bruce A. |
| APPLICANT: Bird, Timothy A. |
| APPLICANT: DuBose, Robert F. |
| APPLICANT: Wiley, Steven R. |
| TITLE OF INVENTION: HEMATOPOIETIN RECEPTORS HPR |
| FILE REFERENCE: 3160-B |
| CURRENT FILING DATE: 2001-10-05 |
| NUMBER OF SEQ ID NOS: 29 |
| SOFTMARE: Matentin version 3.1 |
| SEQ ID NO 29 |
| LENGTH: 1935 |
| Typis DNA |
| ORGANISM: Mus musculus |
| US-09-972-708-29 |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 14
US-09-972-708-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                              S
                                                                                                                      ঠ
                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                        ई
                                                                                                                                                                                                                                                                                                                                                                                                                                    占
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
Pred. No.:
문
                                                                          밁
                                                                                                                                                                         밁
                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-667-289-2 (1-629) x US-09-972-708-29 (1-1935)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    561
                                                                                        241
                                         101
                                                                                                                                                                                181
                                                                                                                                                                                                                                                                      121
                                                                                                                                  81
                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                4.
                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                                                                                                                                                  μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MetAsn***ValThrIleGlnTrpAspAlaValIleAlaLeuTyrIleLeuPheSerTrp
                                                                                                                                                                                                                                                                                                                                                          CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CysThralaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer 120
                                                                                                                                                                           IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGAGTCACCTCACACTTCAGCTGCATGTGGTGATAGCCCTTTATGTGCTCTTCAGATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PheAsnArgIleSerLeuLeuGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                             AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr 100
                                                                                                                                                                                                                                                                      |||||||:::||||:::|||:::|||:::||||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::|||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||:::||::||::||:::||:::||:::||::||:::||:::||:::||::||:::||:::||:::||::||::||:::||:::||::||::||:::||::||::||:::||:::||::||::||:::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::||::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCAATAGGATTTCACTCTTGGAAAAG
                                                                                        AATAGAACAACAGCTCGGATTTGGTATAAAGGCTTTTTCGGAACCTCATGCCTATATGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTGAAACTATTCCAGAACAGACCCTGCTTCCTGATGAATTTGTCTCCTGTTTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5.93e-244
2280.50
78.2%
66.5%
68.6%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HPR1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AND HPR2
```

.ફ

ક 밁 र् 밁 र् В S 밁 ঠ 밁 ঠ B ર્ 밁 र् 밁

> 240 80

60

6

음 성 음

ঠ 🖁 ঠ

8 8 8 8

밁

중 유

ક

음 성 문 ঠ

```
1078
                                                                                                                                                                                                                                                                       1138
                                                                                                                                                                                                                                                                                                                                                                                                                1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAAGAAACTGGCAGCCTTGGAGTTCCCCCCTTTGTCCACCAAACTTCCCAAGAAACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTCCCCTGGAACACAAACCCACAGATTACAAAGAAGAAAGGCTCACAGGACTCCTTGAG
                          PheIleProGluHisLysProThrAspTyrLysLysGluAsn---ThrGlyProLeuGlu
                                                              ProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeuMetAsn
                                                                                                                                                                                                   ArgThrGlyIleLy8ArgArgIleLeuLeuLeuIleProLy8TrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                                         GTCTTCTTGGCCATCATGTTGCCGATTTTTTCTCTGATTGGGATATTTAACAGATCACTT
                                                                                                                                                                                                                                                                                      IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                   | IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuGlyMet
                                                                                                                                                                                                                                                                                                                                                                                                              GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAAGAAACTGGCAGCCTTGGAGTTCCCCCCTTCGTCCACCAAACTTCCCCAGACAGTTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCys----------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTGCGTCCATCATTTCCAGGGCTGAGACTACAAACGATACTGTACCCAAGACCATAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCCTAGGCATGGAGAACTCACAACAACTACACGTCCATCTGGATGATATAGTGATATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValIlePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACATGACATGCACCTGGAACACTGGGAAGCCTACCTACATAGATACCAAGTATATTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal
                                                                                                                                 ATCTTCAGAGGACATCCTGCTTCAGGTAATCATCAAGACATTGGACTTTTGTCGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAATTCTACCTGGAGCCAGACAGCAAGTATGTATTTCAAGTGCGATGTCAAGAAACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAAACCAAACGTGGAGTGTTAAAGAATTTGACGCCAATTTCACATATGTACAGCAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TACTGGAAAAGCAAAACTATGAGAAAGTATTCTGTGAGATGAGATACAAAACAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCTCCACTGACTCACTGCAAGGCAGGAAGTATTTGGTATGGGTCCAAGCTGTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        --------GlnGluThrGly
                              459
                                                              1377
                                                                                                                                                                                                                                                                       1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1020
                                                                                                  440
                                                                                                                                                                                                     1257
                                                                                                                                                                                                                                                                                                                                                                                                                1077
                                                                                                                                                                   420
                                                                                                                                                                                                                                       400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
```

S 문 S

20

음 성

송 유

밁

S 문 δ ₽ δ 유

문 8 밁 ક 밁 중 음

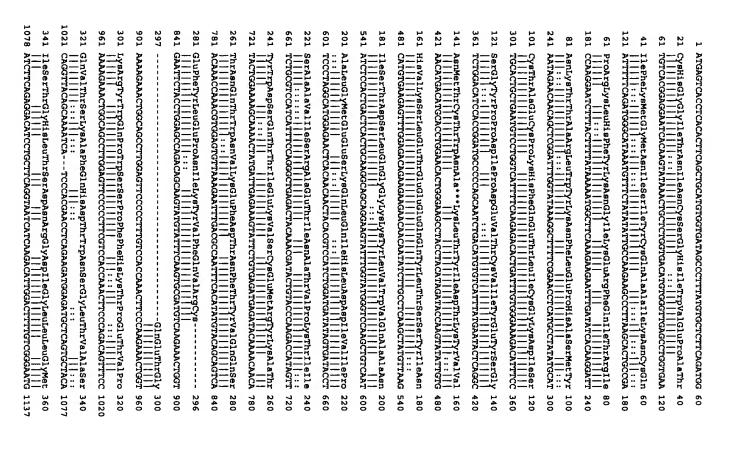
S

유 성 라

S

밁 ð 밁 S 밁 S 밁

```
FILE REFERENCE: 3160-B
CURRENT APPLICATION NUMBER: US/10/715,667
CURRENT FILING DATE: 2003-11-14
PRIOR APPLICATION NUMBER: US/09/972,708
PRIOR FILING DATE: 2001-10-05
NUMBER OF SEQ ID NOS: 29
SOCTWARE: PatentIn version 3.1
SEQ ID NO 29
LENGTH: 1935
TYPE: DNA
ORGANISM: Mus musculus
US-10-715-667-29
                                                                                         Percent Similarity:
Best Local Similarity:
              ફ
                                                                   Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 15
US-10-715-667-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                         US-10-667-289-2 (1-629) x US-10-715-667-29 (1-1935)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          日
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 29, Application US/10715667 Publication No. US20040152161A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                      APPLICANT: Immunex Corporation
APPLICANT: Cosman, David J.
APPLICANT: Mosley, Bruce A.
APPLICANT: Bird, Timothy A.
APPLICANT: DuBose, Robert F.
APPLICANT: Wiley, Steven R.
TITLE OF INVENTION: HEMATOPOIETIN RECEPTORS HPR1 AND HPR2
                                                                                                                                      Мо
::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           460
HisPheAsnArgIleSerLeuLeuGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AsnAsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSer 539
-----GCCAGATTGAAAACATATCCCAACTTCCAATTTTCTGCTTCAAGTATGGCTTTA 1662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATTTCAGTAGAATTTCACTCTTCCAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProSerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGly 599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerProAspIleGlnAsnSerValGluGluGluThrThrMetLeuLeuGluAsnAspSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACAGAGATGAAAGAGACCCTACATCCCTTGAGACCACAGATGACCACTTT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAAGAGACTGTCCTAGGAATGTTGTCTACCAGTTCTTCTGTTGTTATATTCCTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ThrArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCAGTGAAACTATCCCAGCGCAGACTCTGTTGTCTGATGAATTTGTCTCCTGTTTTGGCA 1842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTCTTGACATAAAAACTCAAGACAGGAAGCAGCATCGTTTTGCAAAGTGACTCA 1782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AsnAsnAsnGluIleThrSerLeuThrLeuLysProProValAspSerLeuAspSerGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LeuAsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGluGlySerHisLeuSer 499
                                                                               5.93e-244
2280.50
78.2%
66.5%
68.6%
                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  629
                                                                  1935
432
76
115
27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1608
```



8 8 8 8 8 8 8

중 음 중 음

3 B 3

8 8 8 8

음 중 음

ક

8 4 8 4 8 4 8 4 8 4 8 4 8 4 8 4 8 4 8 4	8 8 8 8 8 8 8 8 8
TCTCCCCTGGAACCACAAACCCACAGATTACAAAGAAGAAAAGGCTCACAGAACTCCTTGAGAACCCACAGAATTACAAAGAAAAAGGCTCACAGAACTCCTTGAG ThrargaspTyrProGlnasnSerLeuPheAspAsnThrThrValValVyIleProAsp	361 IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe 380 :::

Search completed: October 14, Job time: 2007 secs 2006,

ફ

8 8 8 8 8

ફ

음 성 음

8 8 8

ń

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MODEL=frame* p2n.model -DEV-xlh
-Q=/abs9/ABSSWEB spool/US10667289/runat_13102006_111543_24573/app_query.fasta_1
-Q=/abs9/ABSSWEB spool/US10667289/runat_13102006_111543_24573/app_query.fasta_1
-DB=Published Applications NA New -QFMT=fastap -SUFFIX=p2n.rnpbn -MINNATCH=0.I
-COOPCL=0 -LOŌPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFWT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXIEN=200000000 -HOST=abs802h
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  command line parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         _USER=US10667289_@CGN 1_1_238_@runat_13102006_111543_24573 -NCPU=6 -ICPU=3
-NO_MMAP -NEG_SCŌRES=0 -WAIT -TARPOBLOCK=100 -LONGLOG -DEV_TIMEOUT=120
-WARN_TIMEOUT=30 -THREADS=1 -XGAPOB=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7
-YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                              score
                                                                                                                                         Score
                                                                                                                                                                                                                        d. No. is the number of results predicted by chance to have a
re greater than or equal to the score of the result being printed,
is derived by analysis of the total score distribution.
     3314
3292
2192
2175
2175
1695
286
216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         seq length: 0
seq length: 2000000000
                                                                                                                                         Query
Match
                                                                                                                                                                                                                                                                                      Published_Applications NA_New:*

1: /EMC_Celerra_SIDS3/ptodata/1/pubpna/US09_NEW_PUB.seq:*

2: /EMC_Celerra_SIDS3/ptodata/1/pubpna/US06_NEW_PUB.seq:*

3: /EMC_Celerra_SIDS3/ptodata/1/pubpna/US07_NEW_PUB.seq:*

4: /EMC_Celerra_SIDS3/ptodata/1/pubpna/US08_NEW_PUB.seq:*

5: /EMC_Celerra_SIDS3/ptodata/1/pubpna/PCT_NEW_PUB.seq:*

6: /EMC_Celerra_SIDS3/ptodata/1/pubpna/US10_NEW_PUB.seq:*

7: /EMC_Celerra_SIDS3/ptodata/1/pubpna/US11_NEW_PUB.seq:*

8: /EMC_Celerra_SIDS3/ptodata/1/pubpna/US11_NEW_PUB.seq:*

9: /EMC_Celerra_SIDS3/ptodata/1/pubpna/US10_NEW_PUB.seq:*

9: /EMC_Celerra_SIDS3/ptodata/1/pubpna/US10_NEW_PUB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Xgapop 10.0 , X
Ygapop 10.0 , Y
Fgapop 6.0 , F
Delop 6.0 , D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-667-289-2
3326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        October 14, 2006, 14:43:19; Search time 365 Seconds (without alignments) 4829.870 Million cell updi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2395520 ведв,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BLOSUM62
   99.6
0.00
0.00
0.00
0.00
0.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MNXVTIQWDAVIALYILFSW.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Copyright
                                                                                                                                         Length
   1910
2123
1301
1479
1784
360
4040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GenCore version 5.1.9 (c) 1993 - 2006 Biocceleration
                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Xgapext
Ygapext
Fgapext
Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              934235491 residues
US-11-274-375-9

US-11-274-375-5

US-11-274-375-7

US-11-274-375-3

US-11-274-375-3

US-11-274-375-21

US-11-274-375-23

US-11-266-748A-32008
                                                                                                                                         Ħ
                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.5
7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPPQNILESHFNRISLLEK 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        alignments)
Million cell updates/sec
                                                Sequence 9,
Sequence 5,
Sequence 7,
Sequence 3,
                                                                                                                                         Description
                  Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ltd.
 Sequence
 1, App
23, Ap
32008,
                  Appli
Appli
Appli
Appli
Appli
Appli
Appli
   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-11-274-375-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
```

٠.	_	_		•	_	_	~	_	•	٠.	_	_		_	_	_	~	~	٠,	٠.	-	~	٠٠	_	_	_	w	~	٠,	٠.	-	~		_	_	w	w
w	•	139.5	•	140.5	147	148	148	153	155.5	.7	157.5	.7	.7	.7		۳	Ψ	۳	165	165.5	165.5	165.5	170	170	170	173	٥.	186.5	•	188	188	189	9	9	9	203	0
•	•	4.2	•	٠	•	•	4.4	•	•	٠	4.7			•	4.8									٠						5.7		•	•	٠	5.7	•	6.3
10	53	w	15	96	N	83	2	7	35	74	2748	74	72	98	34	8	8	58	2	79	79	71	55	55	55	29	90	19	98	25	25	98	16	73	72	15	8
σ	œ	œ	œ	œ	7	7	J	7	6	9	7	7	9	7	σ	8	0	8	σ	œ	8	9	9	7	7	9	ø	7	7	0	σ	7	æ	0	7	œ	œ
-10-669-920-10	1-266-748A-	-11-266-748A-25050	-11-266-748A-	-11-266-748A-3	-11-353-451-	-11-330-726-1	-11-330-726-	-11-353-451-	-10-669-920-	-11-301-764-	-11-	-11-353-427-	-11-301-764-	-11-353-451-	-10-669-920-	-11-266-748A-27	-10-511-	-11-266-	-10-669-	-11-296-	-11-296-	-11-300-	-11-301-	-11-353-	-11-353-	-11-301-	-11-301-	-11-353-	-11-353-	-10-511-937-310	-10-511-	-11-330-	-11-266-	-10-669-	-11-330-726-1	-11-266-748A-314	1-266-748A-2895
equence 1	e 311023	equence 25050	equence 56701	e 31964	e 1	e 176,	quence 177	e 9,	e 94,	e 111	e 7,	e 7,	e 113	e 13,	e 107	e 2779	e 2820,	quence 560	equence 10:	e 31,	Ø	equence 28,	equence 70,	equence 5,	equence 5,	equence	Ф 4	quence 5,	equence 7, Appl	equence 3102	equence	e 180,	e 2913	equence 109,	equence 179, Ap	equence 31490	55,

ALIGNMENTS

```
Sequence 9, Application US/11274375
Publication No. US20060106201A1
GENERAL INFORMATION:
APPLICANT: Maeda, Masatsugu
APPLICANT: Maeda, Masatsugu
APPLICANT: Yaguchi, Noriko
TITLE OF INVENTION: UNVEL HEMOPOIETIN RECEPTOR PROTEIN, NR12
FILE REFERENCE: 06501-105US1
CURRENT FILING DATE: 2005-11-14
PRIOR APPLICATION NUMBER: US/10/105,930
PRIOR APPLICATION NUMBER: US/10/105,930
PRIOR FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER: PCT/JP00/06654
PRIOR APPLICATION NUMBER: DY 2000-240397
PRIOR APPLICATION NUMBER: JP 2000-240397
PRIOR APPLICATION NUMBER: JP 11-273358
PRIOR FILING DATE: 2000-08-03
PRIOR PILING DATE: 1999-09-27
NUMBER OF SEQ ID NOS: 77
SOFTWARE: FASESEQ for Windows Version 4.0
SEQ ID NO
SEQ ID NO
SEQ ID NO SEQ ID NOS: 77
CORGANISM: Homo sapiens
PRIOR FILING DATE: 1970-09-27
NAME/KEY: CDS
NAME/KEY: CDS
LOCATION: (1)...(1887)
```

97 81 ASBLYSTETERLALANGLEUTIPTYLLYSÄSENPHELEUGLUPTOHISALASELMELTYT 100 241 ANTANARACHGUTGGUTTTGGUTTATANARACHTUTGGARCCACATGGUTCHTOTAC 300 241 ANTANARACHGUTGGUTTTGGUTTATATANARACHTUTGGARCCACATGGUTCHTOTAC 300 241 TGGACTGCARACHGUTGGUTTHATHAGUTTHAGUTTCHTOTACATANARACHTUTCTGGARCACACATTTTCGARCACACACATTTTCC 360 251 TGGACTGCARACHGUTTCGGARCACACAGAGACACATTTTTGGARCACATTTTCC 360 251 TGGACTGCARACHGUTTCCTGARCAAGAGACACATTTTTTGGARTATATCC 360 251 AACATGACTTCACACTGGARACTCCTGARCAAGAGACACTTTATATATATCCTGGTA 480 251 AACATGACTTCACCTGGARACTCCTGGARAGACACATATATCACGTGATA 480 251 AACATGACTTTACAAGACAAAAGAACTTCACCTCACATAGACACACATATCCTGGARATATCCGGTA 480 251 HISVALLYSGSTLEUGLTGTTACAAGTGCACACAAATACACTCCTCACACACACACA	Pred. No.: 3.74e-315 Ametches: 93.14.00 Percent Similarity: 99.5% Dest Local Similarity: 99.6% Percent Similarity: 99.5% Percent Similarity: 99.6% Percent Similarity: 90.6% Percent Sim
Db 1321 TICATCCAGAACCCAAGCCTACAGCACACACACACACACACA	321 GlnvalThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/11/274,375
(CURRENT FILING DATE: 2005-11-14
PRIOR APPLICATION NUMBER: US/10/105,930
PRIOR FILING DATE: 2002-03-25
PRIOR RELING DATE: 2002-03-25
PRIOR RELING DATE: 2000-09-27/JP00/06654
PRIOR RELING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: JP 2000-240397
PRIOR APPLICATION NUMBER: JP 2000-240397
PRIOR FILING DATE: 2000-08-03
PRIOR PILING DATE: 1999-09-27
NUMBER OF SEQ ID NOS: 77
SOFTWARE: FASESEQ for Windows Version 4.0
SEQ ID NO 5
LENGTH: 2123
                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-667-289-2 (1-629) x US-11-274-375-5 (1-2123)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo sap
FEATURE:
NAME/KEY: CDS
LCCATION: (98)...(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     No ::
            201
                                                                                                                                      141
                                                                                                                                                                             121
                                                                                                                                                                                                     398
                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                             338
                                                                                                                                                                                                                                                                                       278
                                                                                                                                                                                                                                                                                                                                218
                                                                                            161
                                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                  98
AlaLeuGlyMetGluGluSerLy8GlnLeuGlnIleHisLeuAspAspIleVallIlePro
                                           IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                     HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                                 ACATGACTTGCACCTGGAATGCTGGGAGGCTCACCTACATAGACACAAATACGTGGTA
                                                                                                                             AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal
                                                                                                                                                         CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                                                                         AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                                                                                                                                                                  ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                                                                                                                                                                                                                                            IlePheLy8MetGlyMetA8nIleSerIleTyrCy8GlnAlaAlaIleLy8A8nCy8Gln
                                                                                                                                                                                                                                                                                                                                                                                     CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                 AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                       ATTTTTAAGATGGGTGTGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                                                                                                                                                                                                                                          TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (1984)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6.27e-313
3292.00
99.2%
98.9%
99.0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                    200
                                                                         637
                                                                                                                  577
                                                                                                                                      160
                                                                                                                                                                                                     457
                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                 100
                                                                                                                                                                                                                                                                                       337
                                                                                                                                                                                                                                                                                                           80
                                                                                                                                                                                                                                                                                                                                                                                             40
                                                                                                                                                                                                                                                                                                                                                                                                                  157
                                 697
                                                                                                                                                            517
                                                                                                                                                                                                                                                                                                                                277
                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                          217
  밁
               S
                                        밁
                                                         δ
                                                                                  밁
                                                                                                δ
                                                                                                                          밁
                                                                                                                                           S
                                                                                                                                                                     밁
                                                                                                                                                                                   Ş
                                                                                                                                                                                                             문
                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                  유 성
                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              청 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                               1478
                                                                                                                                                                                                                                                       1418
                                                                                                                                                                                                                                                                                                                                                                                                                            1178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1118
                                                                                   1658
                                                                                                                             1598
                                                                                                                                                                     1538
                                                                                                                                                                                                                                                                                                  1358
                                                                                                                                                                                                                                                                                                                                                                                    1238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1058
                                                                                                                                                                                                                                                                                                                                          1298
                      561
                                                                                                       521
                                                                                                                                                                                          481
                                                                                                                                                                                                                                   461
                                                                                                                                                                                                                                                                            441
                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                               401
                                                                                                                                                                                                                                                                                                                                                                                                      381
                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         869
 ArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValValTyrIleProAspLeu
                                                                                                                                                                                                                                                       ArgThrGlyIleLysArgArgIleLeuLeuIleProLysTrpLeuTyrGluAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                            GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSerSer
                                                                                                                                                                                                                                                                                                            AsnAsnSerSerGluGlnValLeuTyrValAspProMetIleThrGluIleLysGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ThrasnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                           AGCAACACAATATTTCTTGGAGAATTAAGCCTCATATTAAATCAAGGAGAATGCAGTTCT
                                                                                                                                                                                                               AGAGACTACCCGCAAAACTCGCTATTCGACAATACTACAGTTGTATATATTTCCTGATCTC
                                                                                                                                                                                                                                                                                                  AATAATTCCAGTGAGCAGGTCCTATATGTTGATCCCATGATTACAGAGATAAAAGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TATTGGGATAGTCAAACAACTTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360
   1837
                                            1777
                                                                                                                                                                                                                                                                             460
                                                                                                                                                                                                                                                                                                                                                                                                                                                  380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     340
                      580
                                                                                                                             1657
                                                                                                                                                  520
                                                                                                                                                                      1597
                                                                                                                                                                                          500
                                                                                                                                                                                                               1537
                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                         1477
                                                                                                                                                                                                                                                                                                  1417
                                                                                                                                                                                                                                                                                                                       440
                                                                                                                                                                                                                                                                                                                                           1357
                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                     1297
                                                                                                                                                                                                                                                                                                                                                                                                          400
                                                                                                                                                                                                                                                                                                                                                                                                                             1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            937
```

ð

В 8 문 გ

밁 중 유

중 음

S 문 ঠ 뮵 5 밁 S 밁 5 문

```
Sequence 7, Application US/11274375

Publication No. US20060106201A1

GENERAL INFORMATION:

APPLICANT: Maeda, Masatsugu

APPLICANT: Yaguchi, Noriko

TITLE OF INVENTION: NOVEL HEMOPOIETIN RECEPTOR PRO

FILE REFERENCE: 05501-105US1

CURRENT APPLICATION NUMBER: US/11/274,375

CURRENT FILING DATE: 2005-11-14

PRIOR APPLICATION NUMBER: US/10/105,930

PRIOR FILING DATE: 2002-03-25

PRIOR APPLICATION NUMBER: PCT/JP00/06654

PRIOR FILING DATE: 2000-09-27

PRIOR APPLICATION NUMBER: JP 2000-240397

PRIOR APPLICATION NUMBER: JP 11-273358

PRIOR APPLICATION NUMBER: JP 11-273358

PRIOR FILING DATE: 1999-09-27

NUMBER OF SEQ ID NOS: 77

SEQ ID NO

TYPE: DNA

CEGNITSM. USC. SENION.
                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Homo sapiens
; FEATURE;
; NAME/KEY: CDS
; LOCATION: (1)...(1284)
US-11-274-375-7
                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 3
US-11-274-375-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            D)
            밁
                                                            멍
                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                                                    Alignment Scores: Pred. No.: Score:
                             ક
                                                                                ક
                                                                                                               밁
                                                                                                                                  ફ
                                                                                                                                                              밁
                                                                                                                                                                                        श्
                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                       US-10-667-289-2 (1-629) x US-11-274-375-7 (1-1301)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1958
             241
                                                                                                                121
                                                               181
                                    81
                                                                                       61
                                                                                                                                         41
                                                                                                                                                                   61
                                                                                                                                                                                            21
                                                                                                                                                                                                                                               μ
                                                            ProArgLysLeuHisPheTyrLysAsmGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                               ATTTTTAAGATGGGTATGAATATCTCTATATATTTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                                                                              IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
                                                                                                                                                                                CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                                                     TTCAATAGGATTTCACTCTTGGAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PheAsnArgIleSerLeuLeuGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ValAsnGluGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                                                                                                                   TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                            AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr 100
             AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                               3e-205
2192.00
99.3#
99.3#
65.9#
                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       620
                                                                                        80
                                                                                                                                         60
                                                                                                                                                                                             40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1897
             300
                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         600
                                                             240
                                                                                                                180
                                                                                                                                                                                                                       60
                                               US-11-74-375-3

; Sequence 3, Application US/11274375
; Publication No. US20060106201A1
; GENERAL INFORMATION;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                  र्
                                                                                                                                                                              망
                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
APPLICANT: Maeda, Masatsugu
APPLICANT: Yaguchi, Noriko
TITLE OP INVENTION: NOVEL HEMOPOIETIN RECEPTOR PROTEIN, NR12
FILE REFERENCE: 06501-105US1
                                                                                                                                                                                 1141
                                                                                                                              1201
                                                                                                                                                                                                                                    1081
                                                                                                                                                                                                                                                                                      1021
                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                              341
                                                                                                                                                                                                                                                                                                                                                             321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                      401
                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     101
                                                                                                                            PTOASNMETLYSASNSERASNVALVALLYSMETLEUGIN 413
                                                                                                                                                                                                                                                                                                                                                      GlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                           GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                          GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerAlaAlaVallleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIls
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValllePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIle 400
                                                                                                                                                                                                                                                        IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe
                                                                                                                                                                                                                                                                                                   IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLouLouLouGlyMot
                                                                                                                                                                                                                                                                                                                                                                                                         LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACABACCABACTTGGABTGTTABAGABTTTTGACACCABTTTTTACATATGTGCABCAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TATTGGGATAGTCAAACAACAATTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGTTTGGGTCCAAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AACATGACTTGCACCTGGAATGCTGGGAAGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                    ATCGTCTTTGCTGTTATGTTGTCAATTCTTTCTTTGATTGGGATATTTAACAGATCATTC
                                                                                                                                                                                                                                                                                      ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                                                       CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                         AAAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                    1140
                                                                                                                                                                                                                                                                                        1080
                                                                                                                                                                                                                                                                                                                                         1020
                                                                                                                                                                                  1200
                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                  340
                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                                                    320
                                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
```

```
; LENGTH: 1479
; TYPE: DNA
; ORGANISM: Homo mapienm
; PEATURE:
; NAME/KEY: CDS
; LOCATION: (98)...(1381)
US-11-274-375-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/11/274,375
CURRENT FILING DATE: 2005-11-14
PRIOR APPLICATION NUMBER: US/10/105,930
PRIOR FILING DATE: 2002-03-25
PRIOR PELICATION NUMBER: PCT/JP00/06654
PRIOR FILING DATE: 2000-09-27
PRIOR PELICATION NUMBER: JP 2000-240397
PRIOR PELICATION NUMBER: JP 2000-240397
PRIOR PELICATION NUMBER: JP 358
PRIOR APPLICATION NUMBER: JP 11-273358
PRIOR PELING DATE: 1999-09-27
NUMBER OF SEQ ID NOS: 77
SOFTWARE: PASESEQ for Windows Version 4.0
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
                                            몽
                                                                                S
                                                                                                                           유
                                                                                                                                                                                     밁
                                                                                                                                                                                                                      ક
                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-667-289-2 (1-629) x US-11-274-375-3 (1-1479)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                   458
                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                          398
                                                                                                                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                                                                               338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  158
                                                                                                                                                            161
                                                                                                                                                                                                                                  141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           218
                    201
                                                                                                                                                                                                                                                                                                                                                                                                                                                     81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         86
AlaLeuGlyMetGluGluSerLy8GlnLeuGlnIleHi8LeuAspAspIleValIlePro
                                                                                                                                                                                                                                                                                        SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly
                                                                                                                                                                                                                                                                                                                                                             CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATGTGAAGAGTTTAGAGACAGAAGAAGAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                           HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                                                                                                                                   AATAAAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                    AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                AACATGACTTGCACCTGGAATGCTGGGAGGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                     TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProArgLy8LeuHisPheTyrLy8AsnGlyIleLy8GluArgPheGlnIleThrArgIle
                                                                            IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                                                                                                                                                                                                                                            TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.68e-203
2175.00
99.0%
98.5%
65.4%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1479
407
2
0
                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        337
                                                                                       200
                                                                                                                           637
                                                                                                                                                                                                                                                                     517
                                                                                                                                                                                                                                                                                                                                            457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         157
                                                        697
                                                                                                                                                       GENERAL INFORMATION:

APPLICANT: Maeda, Masstsugu

APPLICANT: Yaguchi, Noriko

TITLE OF INVENTION: NOVEL HEMOPOIETIN RECEPTOR PROTEIN, NR12

FILE REFERENCE: 06501-105US1

CURRENT APPLICATION NUMBER: US/11/274,375

CURRENT APPLICATION NUMBER: US/10/105,930

PRIOR APPLICATION NUMBER: US/10/105,930

PRIOR FILING DATE: 2005-31-14

PRIOR APPLICATION NUMBER: PCT/JP00/06654

PRIOR APPLICATION NUMBER: PCT/JP00/06654

PRIOR APPLICATION NUMBER: JP 2000-240397

PRIOR APPLICATION NUMBER: JP 2000-240397

PRIOR FILING DATE: 2000-09-27

PRIOR APPLICATION NUMBER: JP 11-273358

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5
US-11-274-375-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1, Application US/11274375 Publication No. US20060106201A1
                                                      ORGANISM: Homo sap
FEATURE:
NAME/KEY: CDS
LOCATION: (98)...(
                                                                                                                         LENGTH: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                             1784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IleValPheAlaValMetLeuSerIleLeuSerLeuIleGlyIlePheAsnArgSerPhe 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SeralaalavalIleSerargalaGluThrIleAsnalaThrValProLysThrIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProAsnMetLysAsnSerAsnVallysMetLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIle 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMet 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnValThrSerLy8AlaPheGlnHisAspThrTrpAsnSerGlyLeuThrValAlaSer 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGGTCACATCAAAAGCATTCCAACATGACACATGGAATTCTGGGCTAACAGTTGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ANAAGGTACTGGCAGCCTTGGAGTTCACTGTTTTTTCATAAAACACCTGAAACAGTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TATTGGGATAGTCAAACAACTGAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCTCTACAGGGCACCTTACTTCTGACAACAGAGGAGACATTGGACTTTTATTGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                            sapiens
```

1237

1297

1117

1057

300 937

997

877

```
유용
밁
                    8
                                              밁
                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                 밁
                                                                                                                                                                  श्च
                                                                                                                                                                                          밁
                                                                                                                                                                                                                 ð B
                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                  음 중
                                                                                                                                                                                                                                                                                                                                            몽
                                                                                                                                                                                                                                                                                                                                                                   ક
                                                                                                                                                                                                                                                                                                                                                                                            몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                    닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         श्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        श्च
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-667-289-2 (1-629) x US-11-274-375-1 (1-1784)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŏ
 998
                       301
                                                938
                                                                        281
                                                                                                 878
                                                                                                                         261
                                                                                                                                                 818
                                                                                                                                                                          241
                                                                                                                                                                                                   758
                                                                                                                                                                                                                                                  869
                                                                                                                                                                                                                                                                                                   638
                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                     578
                                                                                                                                                                                                                                                                                                                                                                           161
                                                                                                                                                                                                                                                                                                                                                                                                     518
                                                                                                                                                                                                                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                                                                                                                                                                                                                      458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         158
                                                                                                                                                                                                                          221
                                                                                                                                                                                                                                                                          201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98
               LysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThr 318
                                                              GluPheTyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGly
                                                                                                               ThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                                                                                                                                              TyrTrpAspSerGlnThrThrIleGluLysValSerCysGluMetArgTyrLysAlaThr
                                                                                                                                                                                                                                                  GCACTAGGCATGGAAGAGTCAAAACAACTGCAAATTCACCTGGATGATATAGTGATACTT
                                                                                                                                                                                                                                                                 AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValIlePro
                                                                                                                                                                                                                                                                                                                                                                  HisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                                                                                                                                                                                                                                                                                                                                   AsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIleAspThrLysTyrValVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerGlyTyrProProAspIleProAspGluValThrCysValIleTyrGluTyrSerGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProArgLysLeuHisPheTyrLysAsnGlyIleLysGluArgPheGlnIleThrArgIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTTTTAAGATGGGTGTGAATATCTCTATATATTGCCAAGCAGCAATTAAGAACTGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IlePheLysMetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGTCATGGAGGAATTACAAATATAAACTGCTCTGGCCACATCTGGGTAGAACCAGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TATTGGGATAGTCAAACAACTTGAAAAAGGTTTCCTGTGAAATGAGATACAAGGCTACA
                                                                                                                                                                                                                SerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle
                                                                                                                                                                                                                                                                                                  ATCTCCACTGATTCATTACAAGGTGGCAAGAAGTACTTGGGTTTGGGTCCAAGCAGCAGCAAAC
                                                                                                                                                                                                                                                                                                                    IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AATAMAACAACAGCTCGGCTTTGGTATAAAAACTTTCTGGAACCACATGCTTCTATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                GAATTCTACTTGGAGCCAAACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGC
                                                                                                                                                                                                   TCTGCAGCCGTCATTTCCAGGGCTGAGACTATAAATGCTACAGTGCCCAAGACCATAATT
                                                                                                                                                                                                                                                                                                                                                   CATGTGAAGAGTTTAGAGACAGAAGAAGAGCAACAGTATCTCACCTCAAGCTATATTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGCACTGCTGAATGTCCCAAACATTTTCAAGAGACACTGATATGTGGAAAAGACATTTCT
                                                                                                 ACAAACCAAACTTGGAATGTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                     AACATGACTTGCACCTGGAATGCTGGGAGGCTCACCTACATAGACACAAAATACGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTGGATATCCGCCAGATATTCCTGATGAAGTAACCTGTGTCATTTATGAATATTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2.9e-156
1695.00
98.7%
98.1%
51.0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
 1051
                                                                        300
                                                                                                                                                                                                                                                                                                                           200
                                                                                                                                                                                                                                                                                                                                                                                                                            160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                80
                                                                                                                                                 877
                                                                                                                                                                          260
                                                                                                                                                                                                   817
                                                                                                                                                                                                                                                                          220
                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                     517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         157
                                                                                                 937
                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                  757
                                                                                                                                                                                                                                                                                                   697
                                                                                                                                                                                                                                                                                                                                                  637
                                                                                                                                                                                                                                                                                                                                                                                                     577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         217
                                                997
```

```
PRIOR APPLICATION NUMBER: US/10/105,930
PRIOR FILING DATS: 2002-03-25
PRIOR APPLICATION NUMBER: PCT/JP00/06654
PRIOR FILING DATS: 2000-09-27
PRIOR FILING DATS: 2000-09-27
PRIOR FILING DATS: 2000-08-03
PRIOR APPLICATION NUMBER: JP 11-273358
PRIOR APPLICATION NUMBER: JP 11-273358
PRIOR FILING DATS: 1999-09-27
NUMBER OF SEQ ID NOS: 77
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 23
LENGTH: 360
TYPE: DNA
ORGANISM: Homo sapiens
APPLICANT: Harkin, Paul
APPLICANT: Johnston, Patrick
APPLICANT: Mulligan, Karl
TITLE OF INVENTION: Transcriptome Microarray Technology and
TITLE OF INVENTION: Methods of Using the Same
FILE REFERENCE: 55815-0102 (319189)
CURRENT APPLICATION NUMBER: US/11/266,748A
CURRENT FILING DATE: 2005-11-03
PRIOR APPLICATION NUMBER: EP 04105479.2
PRIOR PILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: EP 04105482.6
PRIOR APPLICATION NUMBER: EP 04105483.4
PRIOR APPLICATION NUMBER: EP 04105483.4
PRIOR APPLICATION NUMBER: EP 04105483.4
PRIOR APPLICATION NUMBER: EP 04105403.0
PRIOR APPLICATION NUMBER: EP 04105403.0
PRIOR APPLICATION NUMBER: EP 04105407.0
PRIOR APPLICATION NUMBER: EP 04105407.0
                                                                                                                                                                                                                                                                                                                                                                    RESULT 7
US-11-266-748A-32008
(S-12-66-748A-32008); Sequence 32008, Application US/11266748A; Publication No. US20060134663A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-667-289-2 (1-629)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 6
US-11-274-375-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 23, Application US/11274375
Publication No. US20060106201A1
GENERAL INFORMATION:
APPLICANT: Maeda, Masatsugu
APPLICANT: Yaguchi, Noriko
APPLICANT: Yaguchi, Noriko
APPLICANT: OSUSU:
APPLICANT: WOUNTED HEMOPOIETIN RECEPTOR PROTEIN,
FILE REFERENCE: 06501-105US1
CURRENT APPLICATION NUMBER: US/11/274,375
CURRENT FILING DATE: 2005-11-14
CURRENT FILING DATE: 2005-11-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
NAME/KEY: CDS
LOCATION: (140)...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ХО.
:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TrpSerSerProPhePheHisLysThrProGluThr 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AsnIleLysTyrValPheGlnValArgCysGlnGluThrGlyLysArgTyrTrpGlnPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ValLysGluPheAspThrAsnPheThrTyrValGlnGlnSerGluPheTyrLeuGluPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTTAAAGAATTTGACACCAATTTTACATATGTGCAACAGTCAGAATTCTACTTGGAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AACATTAAGTACGTATTTCAAGTGAGATGTCAAGAAACAGGCAAAAAGGTACTGGCAGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (295)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6.1e-19
286.00
98.1%
98.1%
8.6%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 x US-11-274-375-23 (1-360)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              51
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NR12
```

```
US-10-667-289-2 (1-629) x US-11-266-748A-32008 (1-4040)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Homo Sapiens
US-11-266-748A-32008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: ED 04105484.2
PRIOR FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: US 60/662,276
PRIOR APPLICATION NUMBER: US 60/700,293
PRIOR FILING DATE: 2005-07-18
PRIOR PILING DATE: 2005-07-18
PRIOR FILING DATE: 2005-07-18
PRIOR FILING DATE: 2005-07-18
PRIOR FILING DATE: 2005-07-18
PRIOR FILING DATE: 2005-07-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version 3.3
SEQ ID NO 32008
LENGTH: 4040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: EP 04105485.9
                                                                                                                                                                                                                                                                                                                                                           1097 TTATACACTGAGTATACTCTACAGCTAAGTGGACCAAAAAATTTAACCTGGCAGAAGCAA 1156
                                                                                                                                                                                                                                                                                                                 187 GlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsnAlaLeuGlyMetGluGlu 206
                                                                                                                                                                                                                                                                                                                                                                                                        154 IleAspThrLysTyrValValHisVal------LysSerLeuGluThrGluGluGlu 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               134 ValileTyrGluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyr 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      114 IleCysGlyLysAspIleSerSerGlyTyrProProAspIleProAspGluValThrCys 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      731 GGCGATGTGACTGTGAAGCCTTCCCATGTAATTTTACTTGGATCCACTGTCAATATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                72 LysGluArgPheGlnIleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLys---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       52 CysGlnAlaAlaIleLysAsnCysGlnProArgLysLeuHisPheTyrLysAsnGlyIle 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  32
AGAATCAAATTTCAAAAGGCTTCCGTGAGCAGATGTACCCCTTTATTGGAGAGATGAGGGA 1390
                                     ArgAlaGluThrIleAsnAlaThrValProLysThrIleIleTyrTrpAspSerGlnThr 246
                                                                                         TCACTTCCATCCACATTCACATTCTTGGACATAGTGAGGCCTCTTCCTCCGTGGGACATT 1330
                                                                                                                                                                                GAA-----TCCAATTTCACAGCCAAGGTTACTGCTGTCAATAGTCTTGGAAGCTCCTCT 1270
                                                                                                                                                                                                                                                                    TGTAAAGACATTTATTGTGACTATTTGGACTTTGGAATCAACCTCACCCCTGAATCACCT 1216
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATACAGAAGGGAGAACAGGGGACTGTGGCCCTGGGAAAGAGGACGAGACACCCAC 1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATGTGGAGCAGAGATCTTCGTTGGTGTTGCTCCAGAACAGCCTCAAAATTTATCCTGC 1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTGGTACAACCTTGTTTGTCTGCAAACTGGCCTGT---ATCAATAGTGATGAAATTCAA 976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACAGAAGAATCAATTTTCACCATGGCCACTCCCTCAATTCTCAAGTCACAGGTCTTCCC 919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAAGGCTGCTTTCACTATTCCAGACGTAACAAGTTA----ATCCTGTACAAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlyHisIleTrpValGluProAlaThrIlePheLysMetGlyMetAsnIleSerIleTyr 51
                                                                                                                                   SerLysGlnLeuGlnIleHisLeuAspAspIleValIleProSerAlaAlaValIleSer 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----SerMetTyrCysThrAlaGluCysProLysHisPheGlnGluThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ----AsnPheLeuGluProHisAla------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.44e-10
216.00
41.6%
23.7%
6.5%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ---TCTTTGAAGCCCAGA----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative: Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4040
75
57
131
54
13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 808
                                                                                  S
  S
                                            밁
                                                                                                                                     밁
                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                              Query Match:
                                                                                                                                                                                                                                                                                                                                                                                     Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             247
```

Ś 밁

ঠ

á 밁 ঠ 밁 δ

В ঠ 밁 δ 밁 S 밁 8 밁 S 밁 5 밁 S

밁

```
Sequence 28955, Application US/11266748A

Publication No. US20060134663A1

GENERAL INFORMATION:

APPLICANT: Harkin, Paul

APPLICANT: Harkin, Paul

TITLE OF INVERTION: Transcriptome Microarray Technology and

TITLE OF INVERTION: Methods of Using the Same

FILE REFERENCE: 55815-0102 (319189)

CURRENT FILING DATE: 2005-11-03

PRIOR APPLICATION NUMBER: ED 04105479.2

PRIOR FILING DATE: 2004-11-03

PRIOR APPLICATION NUMBER: ED 04105482.6

PRIOR APPLICATION NUMBER: ED 04105483.4

PRIOR APPLICATION NUMBER: ED 04105483.4

PRIOR APPLICATION NUMBER: ED 04105483.4

PRIOR APPLICATION NUMBER: ED 04105483.9

PRIOR APPLICATION NUMBER: ED 04105484.9

PRIOR APPLICATION NUMBER: ED 04105484.9

PRIOR APPLICATION NUMBER: ED 04105484.2

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 8
US-11-266-748A-28955
                                                                                                                                                                                                                                                                                                                                                                              US-10-667-289-2 (1-629) x US-11-266-748A-28955 (1-3085)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-11-266-748A-28955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 483996
SOFTWARE: PatentIn version 3.
SEQ ID NO 28955
LENGTH: 3085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US 60/700,293 PRIOR FILING DATE: 2005-07-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1391 CTGGTA-----CTGCTTAATCGACTCAGATATCGGCCCAGTAACAGCAGGCTCTGGAAT 1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1553 TGGAGTGATTGGAGTGAATCATTGAGAGCACAAACACCAGAAGAAGAAGCCT 160:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1493 AAACCATTTACAGAATATGAATTTCAGATTTCCTCTAAGCTACATCTTTATAAGGGAAGT 1552
                                                                           319 GGTGAACTTCTAGATCCATGT---GGTTATATCAGTCCTGAA---TCTCCAGTTGTACAA
                                                                                                                                                                                                                               259 TTGÁCGTTGCÁGACTTGGGTAGTGCAAGCCTTGTTTATTTTCCTCACCACTGAATCTACA 318
44 MetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGlnProArgLys 63
                                                                                                                                               24 GlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThrIlePheLys 43
                                                                                                                                                                                                                                                                  4 ValThrIleGlnTrpAbpAlaValIleAlaLeuTyrIleLeuPheSerTrpCysHisGly :::|||:::||| :::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GluproAsnIleLysTyrValpheGlnValArgCysGln---GluThrGlyLysArgTyr 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATG-----GTTAATGTTACAAAGGCCAAAGGAAGACATGATTTGCTGGATCTG 1492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ValLysGluPheAspThrAsnPheThrTyrVal-----GlnGlnSerGluPheTyrLeu 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ThrIleGluLysValSerCysGluMetArgTyrLysAlaThrThrAsnGlnThrTrpAsn 266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2005-03-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.78e-10
209.00
32.7%
19.4%
6.3%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           320
```

337ThrValAlaSerIleSerThrGlyHisLeuThrSerAspAsnArgGly 352	GINVAlThrSerLyBAlaPheGlnHiBABpThrTrpABnSerGlyLeu:::		ACTICICIATORA CARTA ACARTA CARTA CAR	GlnValArgCysGlnGluThrGlyLysArgTyrTrpGlnProTrpSerSer::::: ::: AGGATTCGCTGTATGAAGAAGAAGCA	273 AsnPheThrTyrValGlnGlnSerGluPheTyrLeuGluProAsnIleLysTyrValPhe 292	254 GluMetArgTyrLysalaThrThrAsnGlnThrTrpAsnValLysGluPheAspThr 272 		ANGCCCAATCCGCCACATAATTTATCAGTGATCAACTCAGAGGAACTGTCTAGTATCTTA		IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn	162ValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn 180 	154 IleAspThrLysTyrValValHis	134 ValileTyrGluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyr 153 	114 IleCysGlyLysAspIleSerSerGlyTyrProProAspIleProAspGluValThrCys 133 :::	94 GluProHisAlaSerMetTyrCysThrAlaGluCysProLysHisPheGlnGluThrLeu 113 :::	74 ArgPheGlnIleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeu 93 :::::	64 LeuHisPheTyrLysAsnGlyIle	::: ::: 373 CTTCATTCTAATTTCACTGCAGTTTGTGTGCTAAAGGAAAAATGTATGGATTAT 426
Db 2407 AAAJ	506 2347	Qy 493 Prod Db 2287 TCAJ	Qy 480 Lew Db 2227 CCT	Oy 477 Db 2167 CTG		2047	Db 1987 ACA: Qy 476	Db 1927 TATI	Db 1867 GAGT Qy 476 Tyr	1807	Qy 433 Meti ::: Db 1750 GTAT	419 1690		Db 1591 CCA	378 1531	1471	1441	1387
AAAATTAATACTGAAGGACACAGCAGTGGTATTGGGGGGTCTTCATGCATG		ProGluGlySerHisLeuSerAsnAsnAsn	LeuAsnThrGlyTyrLysProGlnIleSer	CTGTTCTGCTTTAATAAGCGAGACCTAATTAAAAAACACATCTGGCCTAATGTTCCAGAT 2226	ATTGAAGCCATAGTCGTGCCTGTTTGCTTAGCATTCCTATTGACAACTCTTCTGGGAGTG 2166	GAAGGTGGGAAGGATGGTCCAGAATTCACTTTTACTACCCCAAAGTTTGCTCAAGGAGAA 2106	ACATTGTCCTCTTTGACTAGTGACACATTGTACATGGTACGAATGGCAGCATACACAGAT 2046	TATAGAACCATCATTGGAAATGAAACTGCTGTGAATGTGGATTCTTCCCACACAGAATAT 1986	GAGTGGGACCAACTTCCTGTTGATGTTCAGAATGGATTTATCAGAAATTATACTATATTT 1926 TYF		MECILETIZGIU	nAsnAsnSerSerGluGlnValLeuTyr 	IleProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeu 418 :::	ArgThrGlyI.eLysArgArg1ieLeuLeuLeuI1eProLysTrpLeuTyrGluAsp 399	CCTGTAATGGATCTTAAAGCATTCCCCCAAAGATAACATGCTTTGGGTGGAATGGACTACT 1590	TATCCCTGCCTGTGACTTTCAAGCTACTCAC	eUGIYMECIIEVAINEALAVAINECLEUSERIIEUSERIEUserieus	CARARTTACACAGTTAATGCCACAAAACTGACAGTAAATCTCACAAATGATCGC 1440

4 ValThrIleGlnTrpAspAlaValIleAlaLeu	US-10-667-289-2 (1-629) x US-11-266-748A-31490 (1-3159)	6.1% Indels: 8 Gaps:	203.00 Matches: 172 similarity: 33.4% Conservative: 175 rocal cimilarity: 20.0% Matches: 175 rocal cimilarity: 20.0% Matches: 175 rocal cimilarity: 20.0% Matches: 175	-09 Length:	; ORGANISM: Homo Sapiens US-11-266-748A-31490	~		; PRIOR APPLICATION NUMBER: US 60/700,293 ; PRIOR FILING DATE: 2005-07-18 . NUMBER OF CO ID NOS. 18306	; PRIOR APPLICATION NUMBER: US 60/662,276 ; PRIOR FILING DATE: 2005-03-14	APPLICATION NUMBER: EP 0410548 FILING DATE: 2004-11-03		; PRIOR FILING DATE: 2004-11-03 ; PRIOR APPLICATION NUMBER: EP 04105507.0	; PRIOR FILING DATE: 2004-11-03 ; PRIOR APPLICATION NUMBER: EP 04105483.4	FILING DATE: 200 APPLICATION NUMB	NT FILING DATE: 2005-11-03 APPLICATION NUMBER: EP 04105479.	FILE REFERENCE: 55815-0102 (31918) : CURRENT APPLICATION NUMBER: US/11/266.748A	; TITLE OF INVENTION: Methods of liging the Same	; APPLICANT: Harkin, Faul ; APPLICANT: Johnston, Patrick abortroant. Mulligan Karl	DRMA.	US-11-266-74BA-31490 ; Sequence 31490, Application US/11266748A	SULT 9	Db 2737 ATTTCACATTTTGAAAGG 2754	Qy 619SerHisPheAsnArg 623	Db 2692CAGTACTTCAAACAGAACTGCAGTCAGCATGAATCCAGTCCAGAT 2736	Qy 605 LeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGlu 618	Db 2632 CCAGAAGATCTACAATTAGTAGATCATGTAGATGGCGGTGATGGTATTTTGCCCCAGGCAA 2691		Db 2584 TTCTCAAGATCCGAGTCTACCCAGCCCTTGTTAGATTCAGAGGAGGAGCGG 2631	بر .	Db 2524 GTCCAGTATTCTACCGTGGTACACAGTGGCTACAGACACCAAGTTCCGTCAGTCCAAGTC 2583	еLе	2467	Oy 527 HisproAsnPheAlaPheSerValSerSerValAsnSerLeuSerAsnThrIlePheLeu 546
8	90	Ş	Db £	\$ 8	로 &	В	ş	DЬ	S.	B &	? 5	š 8	DЪ	Ş	DЬ	Ş	рь	Ą	DЬ	δ	DЪ	Ş	망	Ş	Db	Q	망	Ş	8	Q	DЪ	Q	Db
328 nHisAspThrTrpAsnSerGlyLeuThrValAlaSe 340 ::::::	1207 AGTGGGATCACCTATGAAGATAACATTGCCTCCTTTTGAAGCCCAATGGAAAAATCTTGGA 1266	312 PheHisLysThrProGluThrValProGlnValThrSerLysAlaPheG1 328	1147 AGGATTCGCTGTATGAAGGAATGGTAAGGGATACTGGAGTGACTGGAGTGAAGAAGCA 1206	293 GlnValArqCysGlnGluThrGlyLysArqTyrTrpGlnProTrpSerSerProPhe 311	273 AsnPheThrTyrValGInGlnSerGluPheTyrLeuGluProAsnIleLysTyrValDhe 292	1027 AACATTCAATATAGGACCAAAGATGCCTCAACTTGGAGCCAGATTCCTCCTGAAGACACA 1086	254 GluMetArgTyrLysAlaThrThrAsnGlnThrTrpAsnValLysGluPheAspThr 272	976 AAATTGACATGGACCAACCCAAGTATTAAGAGTGTTATAATACTAAAAATAT 1026	236 ProLysThrIleIleTyrTrpAspSerGlnThrThrIleGluLysValSerCys 253	916 AAGCCCAATCCGCCACATAATTTATCAGTGATCAACTCAGAGGAACTGTCTAGTATCTTA 975	862 GCCCTTGGGAAGGTTACATCAGATCATATCAATTTTGATCCTGTATATAAAGTG 915	201 AlaLeuGlyMetGluGluSerLysGlnLeuGlnIIeHisLeuAspAspIleVal 218	835 ATTGAA		775 GCAAAACGTGACACCCCCACCTCATGCACTGTTGATTATTCTACTGTGTATTTTTGTCAAC 834	162VallysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn 180	715 TIGGAGACAAACTICACTITAAAATCIGAATGGGCAACACACAAGTTTGCTGATTGCAAA 774	154 IleAspThrLysTyrValValHis 161	658 ATTGTGAACGAGGGGAAGAAAATGAGGTGTGAGTGGGATGGTGGAAGGGAAACACAC 714	134 VallleTyrGluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyr 153	598 GTTTATGGAATCACAATAATTTCAGGCTTGCCTCCAGAAAAACCTAAAAAATTTGAGTTGC 657	114 IleCysGlγLysAspIleSerSerGlγTyrProProAspIleProAspGluValThrCγs 133	541 TCATTAAATATTCAGCTCACTTGCAACATTCTTACATTCGGACAGCTTGAACAGAAT 597	94 GluProHisAlaSerMetTyrCysThrAlaGluCysProLysHisPheGlnGluThrLeu 113	487 CAATATACTATCATAAACAGAACAGCATCCAGTGTCACCTTTACAGATATAGCT 540	74 ArgPheGlnIleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeu 93	427 TTTCATGTAAATGCTAATTACATTGTCTGGAAAACAAACCATTTTACTATTCCTAAGGAG 486	64 LeuHisPheTyrLysAsnGlyIleLysGlu 73	373 CTTCATTCTAATTTCACTGCAGTTTGTGTGCTAAAGGAAAAATGTATGGATTAT 426	44 MetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGlnProArgLys 63	319 GTTGAACTTCTAGATCCATGTGGTTATATCAGTCCTGAATCTCCAGTTGTACAA 372	24 GlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThrIlePheLys 43	259 TTGACGTTGCAGACTTGGCTAGTGCAAGCCTTGTTTATTTTCCTCACCACTGAATCTACA 318

8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

476	TEATGRAGTGACTCTCACAAGATGGAAATCACACATTTACAAAATTACACACTTAATGCCAC **IleSerThrGlyHisLeuThrSerAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMe
Alignment Scores: Pred. No.: 190.00 Matches: 144 Score: 190.00 Matches: 144 Percent Similarity: 22.1\$ Mismatches: 228 Query Match: 7 Gaps: 197 Qy 104 GluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSerSerGlyTyr 272 GAAGGCAGCCAACATGAAGAAAATGTGGCAACCGTTTTCACTCTGTACTTTT 274 Qy 124 ProProAspIleProAspGluValThrCysValielTyrGlu	

8 8 8

음 성 음

유 *各*

8

음 성 음

B rAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMetIleValPheAlaValMetLeuSe 3	
Db 1976 ACATGCTAAAAACGTGGCTTGAAGAA 2006 RESULT 11 US-10-669-920-109 ; Sequence 109, Application US/10669920 ; Publication No. US20060194265A1 ; GENERAL INFORMATION: APPLICANT: MORTIS, David W. APPLICANT: MAIANDRO: NOVEL THERAPEUTIC TARGETS IN CANCER FILE REFERENCE: 20366-066001 ; CURRENT APPLICATION NUMBER: US/10/669,920 ; CURRENT APPLICATION NUMBER: US 10/004,113 ; PRIOR APPLICATION NUMBER: US 10/004,113 ; PRIOR APPLICATION NUMBER: US 10/052,482 ; PRIOR APPLICATION NUMBER: US 10/052,482 ; PRIOR APPLICATION NUMBER: US 10/052,482 ; PRIOR FILING DATE: 2001-10-23 ; PRIOR PILING DATE: 2001-11-09 ; PRIOR PILING DATE: 2001-11-30 ; PRIOR APPLICATION NUMBER: US 10/034,650 ; PRIOR APPLICATION NUMBER: US 10/034,650 ; PRIOR APPLICATION NUMBER: US 10/085,117 ; PRIOR PILING DATE: 2002-02-27 ; PRIOR FILING DATE: 2002-03-01 ; PRIOR PILING DATE: 2002-03-01 ; PRIOR PILING DATE: 2002-12-17 ; PRIOR APPLICATION NUMBER: US 10/085,199 ; PRIOR FILING DATE: 2002-12-17 ; PRIOR APPLICATION NUMBER: US 10/032,281 ; PRIOR PILING DATE: 2002-12-17 ; PRIOR APPLICATION NUMBER: US 10/322,696	1394 TCC 459 uTh 1454 CAC 479 pLe 1492 uPr 1559 CCC 512 1616 AGG 529 nPh 1668 549 uSe 1694 GGG 569 uGl 1748 GGA 589 uLe 1796 TAA 601 1 603 uGl 1916 GGA 619 rHi 1916 GGA

955CCAGCGACCTTCATTCAGATACCTAGTGACTTCACCATGAATGA	Qy 290 rValPheGlnValArgCysGlnGluThrGlyLysArgTyrTrpGlnProTrpSerSerPr 310	Db 801 TGAAATTCGATTAAAACCCGAGAAAGCAGCTGAGTGGGAGATCCA 845 Qy 273 nPheThrTyrValGlnGlnSerGluPheTyrLeuGluProAsnIleLysTy 290	253 sGluMetArgTyrLysAlaThrThrAsnGlnThrTrpAsnValLysGluPheAspThrAs	Qy 239 eIleTyrTrpAspSerGlnThrThrIleGluLysValSerCy 253	222AlaAlaVallleSerArgAlaGluThrIleAsnAlaThrValProLysThrIl 23	Qy 204 tGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleVallleProSer 221	Oy 191 8TyrLeuValTrpValGlnAlaAlaAsnAlaLeuGlyMe 204	Oy 174 uThrSerSerTyrIleAsnIleSerThrAspSerLeuGlnGlyGlyLysLy 191	Qy 154 eAspThrLysTyrValValHisValLysSerLeuGluThrGluGluGluGlnGlnTyrLe 174 :	Qy 138TyrSerGlyAsnMet-ThrCysThrTrpAsnAla***LysLeuThrTyrIl 154 :::	Qy 124 ProProAspIleProAspGluValThrCysValIleTyrGlu137 :::	Qy 104 GluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSerSerGlyTyr 123	6 Gaps: 9-2 (1-629) x US-10-669-920-109 (1-2736)	190.00 Matches: 144 t Similarity: 34.7% Conservative: 82 ocal Similarity: 22.1% Mismatches: 22 Match: 5.7% Indels: 197	Scores: 2.95e-08 Length:) LIFE: DNA ; ORGANISM: Homo sapiens US-10-669-920-109	ຜ
D	& & &	Q Qy	DD QQ	B &	B &	D 4	} B &) B 5	P &	S B 7	S B S	g Q	Db .	S B (\$ 8	B 8	B 65
1869 ACCAANACAGAGAGAGAACAGCGGCAAGCCCAAGAAGCCCGGGACTCCTGAGAACAÁTAA 1928 603 uGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSe 619 : : 1929 GGAGTATGCCAAGGTGTCCGGGGTCATGGATAACAACATCCTGGTGTTGGTGCCAGATCC 1988	589 uLeuProAspGluPheVal	569 uGluThrThrMetLeuLeuGluAsnAspSerProSerGluThrIleProGluGlnThrLe 589	549 uSerLeuTieLeuAsnGlnGlyGluCysSerSerProAspIleGlnAsnSerValGluGl 569	529 nPheAlaPheSerValSerSerValAsnSerLeuSerAsnThrIlePheLeuGlyGluLe 549	512ProValAspSerLeuAspSerGlyAsnAsnProArgLeuGlnLysHisProAs 529	1572 CCCCAGATCCTCTTACCACATATTACTGATGTGTGTGAGCTGGCTGTGGGCCCTGC 1628	173 DEFECTION OF THE TOTAL PROPERTY OF THE PRO			GAGCTGTGACAGCCCTTC	425 u 432 425 u 432 425 u 432 426	LysMetLeuGlnGluAsnSerGluLeuMetAsnAsnAsnSerSerGl 	AGACTTTC		375 ePheAsnArgSerPheArgThrGlyIleLysArgArgIleLeuLeuLeuIle 392	368 rIleLeuSerLeuIleGlyIl 375	348 rAspAsnArgGlyAspIleGlyLeuLeuLeuGlyMetIleValPheAlaValMetLeuSe 368

•

WESTUET 12 US-11-266-748A-25122 WESTUENCE 2112. Spiciation US/11266748A Sequence 2112. Explication US/11266748A Sequence 2112. Explication US/11266748A Sequence 2112. Explication US/11266748A Sequence 2112. Spiciation Spiciation APPLICANT: Harkin, Paul APPLICANT: Harkin, Paul APPLICANT: Mulligan, Rario APPLICANT: MUSTION: Transcriptome Microarray Technology and ITTLE OF INVESTION: Transcriptome Microarray Technology and The Sequence of Transcriptome Microarray Technology and The Sequence of Transcriptome Microarray Technology and The Sequence of Transcriptome Microarray Technology and Technology an	Qy 619 rHisPheAsnArgIleSerLeuLeuGluLys 629 :::::: ::: Db 1989 ACATGCTAAAAACGTGGCTTGCTTTGAAGAA 2019
B	Oy Db
CONTITION COARGANCITE AND CONTINUE PRODUCTIVE POST	586 GTACACCTCCATGTGGAGGACATACATCATGATGGTCAATGCCACTAACCAGATGGGAAG 645 204 tGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValIleProSer 221

LysAspIleSerSerGlyTyr	US-10-667-289-2 (1-629) x US-11-330-726-180 (1-1869)	y Match: 5.7%	Matches: Conservative:	ent Scores: 2.14e-08 Length:	-726-180	; TYPE: DNA ; ORGANISM: Homo sapiens	μ	; NUMBER OF SEQ ID NOS: 241 ; SOFTWARE: PatentIn version 3.1		FILING DATE: 2001-11-08 APPLICATION NUMBER: US 09/747,	CURRENT FILLING DATE: 2006-01-12 ; CURRENT FILLING DATE: 2006-01-12 ; PRIOR APPLICATION NUMBER: US 10/052,482	; TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR CANCER ; FILE REFERENCE: 20366-011002	APPLICANT: Engelhard, Eric APPLICANT: Morris, David	; Sequence 180, Application US/11330726 ; Publication No. US20060204982A1 ; GENERAL INFORMATION:	RESULT 13	Db 2005 ACATGCTAAAAACGTGGCTTTGAAGAA 2035	Qy 619 rHisPheAsnArgIleSerLeuLeuGluLys 629	Db 1945 GGAGTATGCCAAGGTGTCCGGGGGTCATGGATAACAACATCCTGGTGTTGGTGCCAGATCC 2004	Qy 603 uGluLeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGluSe 619	Db 1885 ACCAAAACAGAGAGAACAGCGGCAAGCCCCAAGAAGCCCCGGGACTCCTGAGAACAATAA 1944	Qy 601 1AspGl 603	Db 1825 TAAACCCTTGGATTATGTGGAGATTCACAAGGTCAACAAGATGGTGCATTATCATTGCT 1884	Qy 589 uLeuProAspGluPheValSerCysLeuGlyIleVa 601	Db 1777 GGATACGCCCTGGCTGCCCCAGGAGAAAACCCCCTTTGGCTCCGC 1824	Qy 569 uGluThrThrMetLeuLeuGluAsnAspSerProSerGluThrIleProGluGlnThrLe 589	Db 1723 GGGAAAGGCAACCCAGCAGAGGGAGGTAGAAAGCTTCCATTCTGAGACTGACCA 1776	Qy 549 uSerLeuIleLeuAsnGlnGlyGluCysSerSerProAspIleGlnAsnSerValGluGl 569	Db 1697TCTCAAACCATTAAGTCTAGAGAAGA 1722	Qy 529 nPheAlaPheSerValSerSerValAsnSerLeuSerAsnThrIlePheLeuGlyGluLe 549	Db 1645 AGGTGCACCGGCCACTCTGTTGAATGAAGCAGGTAAAGATGCTTTAAAATCC 1696	512ProValAspSerLeuAspSerGlyAsnAsnProArgLeuGlnLysHisProAs	1588 CCCCAGATCCTCTTACCACAATATTACTGATGTGTGAGCTGGCTGTGGGCCCTGC	Qy 492 uProGluGlySerHisLeuSerAsnAsnAsnGluIleThrSerLeuThrLeuLysPro 511
8	ט	\$ 8	뫄	γQ	Db .	S S	Db	ફ	유 성	Db	Ś	Db l	8	DB 89	Db	Ş	рb	S	Db	ð	Дb	ঠ	DЬ	ð	Db	ð	Дb	S	Db	ঠ	Дb	ઇ	Db
415 nSerGluLeuMetAsnAsnAsnAsnSerSerGluGinValLeuTy 429	AGIAIIIAGAAGIAGAIGAIAGIGAGA	roAsnMetLysAsnSerA	867 TGAAGAACTACTGAGTGCCTTGGGATGCCAAGACTTTCCTCCCACTTCTGACTATGAGGA 926	385 sArgArgIleLeuLeuIle	807 GCCAGTTCCTGGGCCAAAAATAAAAGGATTTGATGCTCATCTGTTGGAGAAGGGCAAGTC 866	374Through the second of	747 TITGATTATTGTCTGGGCAGTGGCTTTGAAGGGCTATAGCATGGTGACCTGCATCTTTCC 806	358 uGlyMetIleValPheAlaValMetLeuSerIleLeuSerLeuIle 373	338 LALASETILESETINGTYHIBLEUTNISETABDABNATGGLYABDLIEGLYTEULEULE 350	TCAGATACCTAGTGACTTCACCATGAATGATACAACCGTGTGGATCTCTGT	oGlnValThrSerLysAlaPheGlnHisAspThrTrpAsnSerGlyLeuThrVa	633 CCATGGATACTGGAGTGCATGGAGT	300 yLysArgTyrTrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPr 320	283TyrLeuGluProAsnIleLysTyrValPheGlnValArgCysGlnGluThrGl 300	534 TGAGTGGGAGATCCATTTTGCTGGGCAGCAAACAGAGTTTAA 575	263 nThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSerGluPhe 282	474 CTTAAAAACTGGTTGGTTCACGCTCCTGTATGAAATTCGATTAAAACCCGAGAAAGCAGC 533	249 uLysValSerCysGluMetArgTyrLysAlaThrThrAsnGl 263	423 AGACAGAAAACCCTACCTGTGGATTAAATGGTCTCCACCTACCCTGATTGA 473	229 uThrileAsnAlaThrValProLysThrileIleTyrTrpAspSerGlnThrThrileGl 249	363 GACTTACATAGTTCAGCCAGACCCTCCTTTGGAGCTGGCTG	214 uAspAspIleVallleProSerAlaAlaVallleSerArgAlaGl 229	303 GATGGTCAATGCCACTAACCAGATGGGAAGCAGTTTCTCGGATGAACTTTATGTGGACGT 362	194 lTrpValGlnAlaAlaAsnAlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLe 214	243 TGGCCCCAACTCCTGCCACTTTGGCAAGCAGCAGCACACCTCCATGTGGAGGACATACAT	181 eSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuVa 194	183 ACTGACTTACCACAGGGAAGGAGACACTCATGCATGAATGTCCAGACTACATAACCGG 242	164 rLeuGluThrGluGluGluGlnTyrLeuThrSerSerTyrIleAsnIl 181	138 CTGGTGGAGGCCTGGGACAGATGGAGGACTTCCTACCAATTATTC 182	144 gThrTrpAsnAla***LysLeuThrTyrTleAspThrLysTyrValValHisValLysSe 164	78 ACCTCCTGGAAAACCTGAGATCTTTAAATGTCGTTCTCCCAATAAGGAAACATTCACCTG 137	134 VallleTyrGluTyrSerGlyAgnMet-ThrCy 144	

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뫄
                                                                                                                                                                                                                                                                           US-10-511-937-3101
                                                                                                                                                                                        Sequence 3101, Application US/10511937
Publication No. US20060088836A1
GENERAL INFORMATION:
APPLICANT: EXPRESSION DIAGNOSTICS, IN
                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
                                                                                     APPLICANT:
                                           APPLICANT:
      င္ပ င္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1086
                                                                                                                                                                                                                                                                                                                                           1722 A 1722
                                                                                                                                                                                                                                                                                                                                                                                                                            T: Morris, MacDonald
T: Rosenberg, Steven
INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING
INVENTION: AND MONITORING TRANSPLANT REJECTION
                                                                                                                                                                                                                                                                                                                                                                                   8 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAAGAAGCCCGGGACTCCTGAGAACAATAAGGAGTATGCCAAGGTGTCCGGGGGTCATGGA 166:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rSerProAspIleGlnAsnSerValGluGluGhrThrThrMetLeuLeuGluAsnAspSe 579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGTAAAGATGCTTTAAAATCC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               nGluIleThrSerLeuThrLeuLysPro-----ProValAspSerLeuAspSerGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGGCCCTTACCACAGCCCAGCCAGCACCACAACCCCCAGATCCTCTTAC---CACAATATTAC 130:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGAGAAGCCAGAGAATCCTGAAACAACCCACACCTGGGAC---CCCCAGTGCATAAGCAT 1190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAGTGTGAG-----GAACCCCAGGCCAATCCCTCCACATTCTATGATCCTGAGGTCAT 1139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ulleLysGluIlePheIleProGluHisLysProThrAspTyr-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    oGlnAsnIleLeu------GluSerHisPheAsnArgIleSerLeuLeuGluLy 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -CCCCAGGAGAAAACCCCCTTTGGCTCCGCTAAACCCTTTGGATTATGTGGAGAGTTCACAA 1541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGC-----TTCCATTCTGAGACTGACCAGGATACGCCCTGGCTG------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              yAsnAsnProArgLeuGlnLysHisProAsnPheAlaPheSerValSerSerValAsnSe 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGAAGGCAAA------ATCCCCTATTTTCATGCTGGTGGATCCAAATGTTCAAC 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        eAspAsnThrThrValValTyrIleProAspLeuAsnThrGlyTyrLys------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTGGATCCTGACTGACTCAGGCCGGGGGAGCTGTGACAGCCCTTTCCCTTTTGTCTGA 1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rValAspPro----MetIleThrGl 436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCAGCATCTAATGTCAGTCCATTCAAAAGAACACCCAAGTCAAGGTATGAAACCCACATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rProSerGluThrIleProGluGlnThrLeuLeuProAspGluPheVal------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rLeuSerAsnThrIlePheLeuGlyGluLeuSerLeuIleLeuAsnGlnGlyGluCysSe 559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ----LysLysGluAsnThrGlyProLeuGluThrArgAspTyrProGlnAsnSerLeuPh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----SerCysLeuGlyIleVal-----
                                                                                                                      Wohlgemuth, Jay
Fry, Kirk
Woodward, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----AsnGluGluLeuProSerIleAsnThrTyrPhePr 613
                                                                                                         Ly, Ngoc
                                                                                     Prentice, James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProGlnIleSerAsnPheLeuProGluGlySerHisLeuSerAsnAsnAs 502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; FILE REFERENCE: 506612000104
; CURRENT APPLICATION NUMBER: US/10/511,937
; CURRENT FILING DATE: 2004-10-19
; PRIOR APPLICATION NUMBER: PCT/US2003/012946
; PRIOR FILING DATE: 2003-04-24
; PRIOR APPLICATION NUMBER: US 10/131,831
; PRIOR APPLICATION NUMBER: US 10/131,831
; PRIOR APPLICATION NUMBER: US 10/325,899
; PRIOR FILING DATE: 2002-04-24
; PRIOR FILING DATE: 2002-12-20
; NUMBER OF SEQ ID NOS: 3117
; SOFTWARE: PATEENTIN VECTSION 3.2
; SEQ ID NO 3101
; LENGTH: 5252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: DNA
; ORGANISM: Homo
US-10-511-937-3101
                                                               밁
                                                                                                     S
                                                                                                                                                   밁
                                                                                                                                                                                 S
                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                     뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-667-289-2 (1-629) x US-10-511-937-3101 (1-5252)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1333
                                                                                                                                                   1603
                                                                                                                                                                                                                                                                                                                     1504
                                                                                                                                                                                                                                                                                                                                                                                                           1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    198
                          309
                                                                                                                                                                                                                                                                                                                                                               238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        111 GluThrLeuIleCysGlyLysAspIleSerSerGlyTyrProProAspIleProAspGlu 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         131 ValThrCysValIleTyrGluTyrSerGlyAsnMetThrCysThrTrpAsnAla***Lys 150
    SerProPhePheHisLysThrProGluThrValProGlnValThrSerLysAlaPheGln 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AlaAlaAsnAlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIle 217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAATATGTTAGACTTAAAAGAGCTGAAGCACCTACAAACGAAAGCTAT----- 1332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGAATTGTGAGACACATGATTTAAAA----GAAATTATATGTAGTTGGAATCCAGGAAGG 1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAAGATAACATATTTGGAACCGTTATTTTTGCTGGATATCCACCAGATACTCCTCAACAA 1167
                                                               CTATATACTTTTCGGATTCGTTGTTCTACTGAAACTTTCTGGAAATGGAGCAAATGGAGC
                                                                                                                                                   ATCANAGGAGTÁGAAAATTCAAGTTATCTTGTTGCTCTGGACAAGTTÁAATCCATACACT 1662
                                                                                                                                                                                                                                                                                                                                                                                                                                                ValIleProSerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrValProLys 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuThrTyrIle-----AspThrLysTyrVal------
                                                                                                  LysTyrValPheGlnValArgCysGlnGluThrGlyLysArgTyrTrpGlnProTrpSer
                                                                                                                                                                                          Tyr------LeuGluProAsnIle
                                                                                                                                                                                                                                      GAAATTAAGAAATCT----
                                                                                                                                                                                                                                                                         ArgTyrLysAlaThrThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThr 275
                                                                                                                                                                                                                                                                                                                     -----CTTTCTTGGCATTTACCAGGCAACTTTGCAAAGATTAATTTTTTTATGTGAAATT 1557
                                                                                                                                                                                                                                                                                                                                                             ThrIleIleTyrTrpAspSerGlnThrThrIleGluLysValSer-----CysGluMet 255
                                                                                                                                                                                                                                                                                                                                                                                                       GCTCACAATCCGCTGGGTCGATCACAATCAACAATTTTA---GTTAATATAACTGAAAAA 1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -----CAATTATTATTTCAAATGĆTTCCAAATCAAGAAATATATAATTTTACTTTGAAT 1386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TyrIleAsnIleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGln 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----ValHisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSer 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGACAGCGTTGGTGGGGCCCACGTGCTACAAGCTACACTTTAGTTGAAAGTTTTTCAGGA 1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.18e-07
188.00
36.0%
22.2%
5.7%
                                                                                                                                                                                                                                    -----AATTCAGTACAAGAGCAGCGGAATGTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5252
109
68
184
130
26
                                                                      1722
                                                                                                                                                                                                                                      1602
                                                                                                                                                                                                                                                                                                                                                                                                             1503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                159
```

8 밁 S

밁

S 밁 ঠ 밁 S 밁 Ş δ

Ś 밁 Ś S

S 밁 S 밁 δ

श्च

밁

₽

8

몽

```
US-10-511-937-3102
                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 15
                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: EXPRESSION DIAGNOSTICS, INC.
                                                                                                                                                                                                                                                                                                                                          Sequence 3102, Application US/10511937 Publication No. US20060088836A1
APPLICANT: Prentice, James
APPLICANT: Morrie, MacDonald
APPLICANT: Rosenberg, Steven
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING
TITLE OF INVENTION: AND MONITORING TRANSPLANT REJECTION
FILE REFERENCE: 506612000104
CURRENT APPLICATION NUMBER: US/10/511,937
CURRENT FILING DATE: 2004-10-19
PRIOR APPLICATION NUMBER: PCT/US2003/012946
                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1768 CCTGATACTTGGAGA----
                                                                                                                                                                                                                                                                                                                                                                                                                                                            2341 TTTACTGTTGAGGATACTTCTGCAGATTCGATA 2373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2014 ATAGCGAGTATGGAAATTCCAAATGATGATCTCAAAATAGAACAAGTTGTTGGGATGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      475 ValTyrIleProAspLeuAsnThrGlyTyrLysProGlnIleSerAsnPheLeuProGlu 494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTCCCATTGTT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LysProProValAspSerLeuAspSerGlyAsnAsnProArgLeuGlnLysHisProAsn 529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCATGCCTTATGGACTGGAGAAAAGTTCCCTCAAACAGC-----ACTGAAACTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATGACTACATCATCAGCGTAGTGGCTAAAAATTCTGTGGGCTCATCACCACCTTCCAAA 2013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACACAGTCCCTTTCTGAAATCCCTGATCCTCAGCACAAAGCAGAGATACGACTTGATAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ArgArgIleLeuLeuIleProLysTrpLeuTyrGlu---AspIleProAsnMetLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IleLeuSerLeuIleGlγ-----IlePheAsnArgSerPheArgThrGlyIleLys 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATGGAAAA------AATTTAATAATCTATTGGAAGCCTTTACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AspAsnArgGlyAspIleGlyLeuLeuLeuGlyMetIleValPheAlaValMetLeuSer 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HisAspThrTrpAsnSerGlyLeuThrValAlaSerIleSerThrGlyHisLeuThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATAAAAAACAACATTTAACAACAGAAGCCAGTCCT----TCAAAGGGG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGATGCAGAAATCAAGGATATCAATTATTACGCTCCATGATTGGATATATAGAAGAATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlySerHisLeuSerAsnAsnAsnGluIleThrSerLeu------ThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATAGAATCTGATGAGTTTCGACCAGGTATAAGA-----TATAATTTTTTCCTGTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pro-----LeuGluThrArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrVal 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IleProGluHisLysProThrAspTyr------LysLysGluAsnThrGly 456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGGGGATTCTCCTCACCTGGCATTACGACCCCAACATGACT-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AsnSerAsnValValLysMetLeuGlnGluAsnSer----------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PheAlaPheSerValSerSerValAsnSerLeu 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----GluLeuMetAsnAsnAsn---SerSerGluGlnValLeu------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTAATGAAGCTAATGGAAAAATACTTTCCTACAATGTATCGTGTTCATCAGATGAGGAA
                                                                                                                                                                                                                                                                       Wohlgemuth, Jay
                                                                                                                                                                                                          Ly, Ngoc
                                                                                                                                                                                                                             Fry, Kirk
Woodward, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----TyrValAspProMetIleThrGluIleLysGluIlePhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ------GAGTGGAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -----GCACCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; PRIOR FILING DATE: 2003-04-24;
; PRIOR APPLICATION NUMBER: US 10/131,831;
; PRIOR FILING DATE: 2002-04-24;
; PRIOR APPLICATION NUMBER: US 10/325,899;
; PRIOR FILING DATE: 2002-12-20;
; NUMBER OF SEQ ID NOS: 3117;
; SOFTWARE: Patentin version 3.2;
; SEQ ID NO 3102;
; SEQ ID NO 3102;
; LENGTH: 5252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match:
DB:
                           S
                                                                        밁
                                                                                                        5
                                                                                                                                                            밁
                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                  ĝ
                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-667-289-2 (1-629) x US-10-511-937-3102 (1-5252)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-511-937-3102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc feature
LOCATION: (3967)...(3988)
OTHER INFORMATION: n is a, c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
0
::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1108 GAAGATAACATATTTGGAACCGTTATTTTTGCTGGATATCCACCAGATACTCCTCAACAA 1167
                                                                                                                                                                1603
                                                                                                                                                                                                                                                                                                                                                                                                                                   1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1168 CTGAATTGTGAGACACATGATTTAAAA---GAAATTATATGTAGTTGGAATCCAGGAAGG 1224
                                                                                                                                                                                                                                                                                                                                               1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        111 GluThrLeuIleCysGlyLysAspIleSerSerGlyTyrProProAspIleProAspGlu 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          151 LeuThrTyrIle------AspThrLysTyrVal-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              131 ValThrCysValIleTyrGluTyrSerGlyAsnMetThrCysThrTrpAsnAla***Lys 150
  SerProPhePheHisLysThrProGluThrValProGlnValThrSerLysAlaPheGln :::
                                                                        ATCAAAGGAGTAGAAAATTCAAGTTATCTTGTTGCTCTGGACAAGTTAAATCCATACACT 1662
                                                                                                                                                                                                                                                      GAAATTAAGAAATCT------AATTCAGTACAAGAGCAGCGGAATGTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                              ValIleProSerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrValProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTCACAATCCGCTGGGTCGATCACAATCAACAATTTTA---GTTAATATAACTGAAAAA 1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ----CAATTATTATTTCAAATGĊTTCCAAATCAAGAAATATATAATTTTACTTTGAAT 1386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -----ValHisValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGACAGCGTTGGTGGGCCCACGTGCTACAAGCTACACTTTAGTTGAAAGTTTTTTCAGGA 1284
                                                                                                               LysTyrValPheGlnValArgCysGlnGluThrGlyLysArgTyrTrpGlnProTrpSer
                                                                                                                                                                                                          Tyr-----ValGlnGlnSerGluPheTyr------LeuGluProAsnIle 288
                                                                                                                                                                                                                                                                                              ArgTyrLysAlaThrThrAsnGlnThrTrpAsnValLysGluPheAspThrAsnPheThr
                                                                                                                                                                                                                                                                                                                                                                                      ThrileIleTyrTrpAspSerGlnThrThrileGluLysValSer-----CysGluMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlaAlaAsnAlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TyrileAsnIleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGln 197
                                                                                                                                                                                                                                                                                                                                               -----CTTTCTTGGCATTTACCAGGCAACTTTGCAAAGATTAATTTTTTATGTGAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.18e-07
188.00
36.0%
22.2%
5.7%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ņ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative: Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               68
184
130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     109
                                                                                                                                                                                                                                                                                                                                                                                                                                       1503
                                                                                                                                                                                                                                                      1602
                                                                                                                                                                                                                                                                                                                                               1557
                                                                                                                                                                                                                                                                                                   275
                                                                                                                                                                                                                                                                                                                                                                                           255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            159
```

र्

문 र् B 8 문

B

र् 밁 र् & ঠ 문 ð В 8 밁 ð 멍 8 밁

This Page Blank (uspto)

```
Run
                                                                                                                                                                                                                 Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -Q-/Abss/ABSSWEB spool/US10667289/runat 13102006_111538_24459/app_query.fasta_1
-Q-/Abss/ABSSWEB spool/US10667289/runat 13102006_111538_24459/app_query.fasta_1
-DB=1ssued Patents NA -QFMT=fastap -SUFFTX=p2n.rni -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=5its -START=1 -END=1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15
-MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-HOST=abss03p -USSR=US10667289 @CGN 1 1 307 @runat 13102006 111538 24459
-NCSU=6 -ICPU=3 -NO_MANA -NEG SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Command line parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            on:
                                                                                                                                                                                                                                                                                                                       score
                                                                                                                                                                                                                                                                                                                                           Pred. No.
                                                                                                                                                                                          Score
                                                                                                                                                                                                                                                                                                   seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                              No. is the number of results predicted by chance to have a greater than or equal to the score of the result being printed, s derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             p2n.model -DEV=xlp
                                                                                                                                                                                          Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Issued
1: /EN
2: /EN
3: /EN
4: /EN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Xgapop 10.0 ,
Ygapop 10.0 ,
Fgapop 6.0 ,
Delop 6.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-667-289-2
3326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1403666 ведв,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    October 14, 2006, 14:34:36; Search time 312 Seconds (without alignments)
    /EMC_celerra_SIDS3/ptodata/2/ina/1_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/5_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/6E_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/6E_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/7_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/PCTUS_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/PCTUS_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/PCTUS_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/PCTUS_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/RE_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/RE_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MNXVTIQWDAVIALYILFSW....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Copyright
                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patents_NA:*
    2859
2995
4040
4040
4040
4040
4040
6019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GenCore version 5.1.9 (c) 1993 - 2006 Biocceleration Ltd.
                                                                                                                                                                                             BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Xgapext
Ygapext
Fgapext
Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      935554401 residues
US-09-853-180B-1

US-09-700-820C-17

US-08-685-118-1

US-08-915-495-1

US-08-914-520-1

US-09-949-016-1887

US-09-543-679A-2896

US-09-543-679A-2897
                                                                                                                                                                                          Ħ
                                                                                                                                                                                                                                                         SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.5
7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (without alignments)
5658.305 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYFPQNILESHFURISLLEK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2807332
                                                            Sequence 1, Appli
Sequence 17, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
                                                                                                                                                                                          Description
                 Sequence
Sequence
  1887,
2896,
2897,
```

, App	Sequence	-09-012-07	ω	μ,	5.1	168.5	•
•	Sequence	-09-071-224-	ω	72	•	70.	_
, App	Sequence	-08-347-003-	N	49	٠	71.	_
Appli	Sequence	-07-943-843-	N	49	٠	71.	
, App	Sequence	-07-923-976-	N	29	٠	81.	_
828, A	Sequence	0-131-831-882	տ	25	5.7	188	Ŭ
827,	æ	-10-131-831-882	ۍ	25	•	8	_
28	Œ	-10-131-827-88	w	25	5.7	8	~
827	O	-10-131-827-882	w	25	•	8	7
338, App	Φ	-09-949-016-	ω	25	•	8	٠,
210	Sequence	-09-949-016-42	w	K)	٠	188	٠.
, App	දි	-08-347-003-	N	59	5.7	æ	-
•	•	-07-943-843-	2	59	5.7		~
1, Appli	Sequence	-08-347-003-	ν	18	5.7	188	۰
, App	Sequence	07-943-843-	N	18		188	_
, Appl	O	07-797-556-	N	18	5.7	188	_
57, A	equenc	09-949-016-	ω	72	٠	190	_
, App	æ	T-US95-06530-	7	36	•	206	w
•	Sequence	09-455-962-	ω	36	•	206	7
, App	equenc	-09-058-264-	ω	36	•	206	01
, App	Sequence	-059-099-	N	36		206	٠.
, App	equenc	-09-058-263-	N	36	•	206	-
'	equenc	-08-308-881-	N	36	•	206	~
	Sequence	-07-797-556-	N	36	•	206	۰
	Seguence	-10-282-162-2	u	50	•	207	_
ω,	æ	-09-313-942-2	ω	50	•	207	_
	equenc	-10-282-16	ω	47	6.2	207	v
25, Appl	equenc	-09-313-942-2	w	4	•	207	w
4, Appli	Sequence	-09-439-85	ω	8	•	207	7
	•	8-795-473B	w	80	•	207	01
	equenc	-09-312-61	ω	1977	•	207	01
3, Appli	equenc	-08-825-558-	N	97	•	207	**
, Ap	equenc	-09-949-002-	ω	8	•	208	w
, App		-09-949-002-4	ω	8	•	209	٥
131, A	Sequence	9-023-655-	ω	3085	•	209	_
App1	Ō	-09-312-61	ω	75	6.3	211	٥
, App	Sequence	US-08-825-558-5	N	75	6.3	211	Ψ

ALIGNMENTS

US-09-853-180B-1 RESULT 1 SOFTWARE: Pate: SEQ ID NO 1 LENGTH: 2859 GENERAL INFORMATION: Sequence 1, Application US/09853180B Patent No. 6756481 CURRENT APPLICATION NUMBER: US/09/853,180B CURRENT FILING DATE: 2001-05-10 PRIOR APPLICATION NUMBER: 60/203,426 PRIOR FILING DATE: 2000-05-10 NUMBER OF SEQ ID NOS: 4 SOPTWARE: PatentIn version 3.2 APPLICANT: Kastelein, Robert A.

APPLICANT: Moore, Kevin W.

TITLE OF INVENTION: Mammalian Receptor Proteins; Related Reagents APPLICANT: Chirica, Madaline APPLICANT: Parham, Christi L. FILE REFERENCE: DX01074 NAME/KEY: misc_feature LOCATION: (127)..(127) OTHER INFORMATION: k means g or t/u. OTHER INFORMATION: originally filed. TYPE: DNA
ORGANISM: Homo FEATURE:
NAME/KEY: mat_peptide
LOCATION: (188)..(2005) NAME/KEY: CDS LOCATION: (119)..(2005) FEATURE: sapiens See page 12, line 34, of patent application and Methods.

```
Alignment Scores:
Pred. No.:
Score:
Score:
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
   음 & 음
                       रु 🖁 र
                                                                                                                                                                                   8 8 8 8
                                                                                                                                                                                                                   US-10-667-289-2
                                                                                                                                                                                                                                                        ; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (563)..(563)
; OTHER INFORMATION: r means g or
; OTHER INFORMATION: originally fi
                                                                                                                                                                                                                                                         ŝ
   899
         261
                 839
                                               719
                                                               659
                                                                    181
                                                                              599
                                                                                    161
                                                                                            539
                                                                                                           479
                                                                                                                          419
                                                                                                                                 101
                                                                                                                                        359
                                     221
                                                     201
                                                                                                   141
                                                                                                                   121
                                                                                                                                                        299
                                                                                                                                                                       239
                                                                                                                                                81
                                                                                                                                                               61
                                                                                                                                                                              4
                  CysThrAlaGluCysProLysHisPheGlnGluThrLeuIleCysGlyLysAspIleSer
                                                                                                                                                        ProArgLysLeuHisPheTyrLysAsmGlyIleLysGluargPheGlnIleThrargIle
                                                                                                                                                                      CysHisGlyGlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThr
                                                                                                                                                                                                     ThrasnGlnThrTrpAsnValLysGluPheAspThrAsnPheThrTyrValGlnGlnSer
                                 SerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrValProLysThrIleIle
                                                AsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGluProHisAlaSerMetTyr
                                                                                                                                                                                                                    (1-629)
                                                                                                                                                                                                                              0
3324.00
100.0%
100.0%
99.9%
                                                                                                                                                                                                                    ×
                                                                                                                                                                                                                   US-09-853-180B-1 (1-2859)
                                                                                                                                                                                                                                                            or a.
y filed.
                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                See
                                                                                                                                                                                                                                                               page 12, line 36, of patent application
                                                                                                   160
                                                                                                           538
                                                                                                                          478
                                                                                                                                  120
                                                                                                                                                100
                                                                                                                                                                                             40
                                 838
                                        240
                                                       220
                                                                                                                  140
                                                                                                                                                               80
                                                                                                                                                                       298
                                                                                                                                                                              60
                                                                                                                                                                                      238
                                                                              658
                                                                                                                                                                                                                                                                88
       S
                                                                                                                                                                                                                                                    8 8 8 8
RESULT
                                                                  1739
                                                                                                                                                           1379
                                                                                                                                                                                                                                     1079
                                                                                                                                             1439
                                                                                                                                                                           1319
                                                    1799
                                                                                  1679
                                                                                                1619
                                                                                                               1559
                                                                                                                              1499
                                                                                                                                                                                         1259
                                                                                                                                                                                                        1199
                                                                                                                                                                                                                                                     1019
                                     1859
                                                          561
                                                                         541
                                                                                                       501
                                                                                                                      481
                                                                                                                                                  441
                                                                                                                                                                                 401
                                                                                                                                                                                                               361
                                                                                                                                                                                                                                             321
                                          581
                                                                                                                                     461
                                                                                                                                                                                                 381
                                                                                                                                                                                                                                                            301
                                                                                         521
                                                                                                                                                                                                                                                                           281
                     SerGluThrIleProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIle
                                                                  ArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAspIle
                                                                                                                                                                                                        LysargTyrTrpGlnProTrpSerSerProPhsPheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                   PheAsnArgIleSerLeuLeuGluLys
              629
                                     1918
                                                    1858
                                                                                  1738
                                                                                                                1618
                                                                                                                              1558
                                                                                                                                                            1438
                                                                                                                                                                           1378
                                                                                                                                                                                          1318
                                                                                                                                                                                                         1258
                                                                                                                                                                                                                                                      1078
                                                                                                                                                                                                                                                                    1018
                       1978
                                                            580
                                                                                                 1678
                                                                                                                       500
                                                                                                                                                                    440
                                                                                                                                                                                   420
```

US-09-700-820C-17

```
GENERAL INFORMATION:

APPLICANT: TSUChiya, Masayuki
APPLICANT: Saito, Mikiyoshi
APPLICANT: Ohtomo, Toshihiko
TITLE OF INVENTION: NOVEL METHOD FOR GENE CLONING
FILE REFERENCE: 06501-070001
CURRENT APPLICATION NUMBER: US/09/700,820C
CURRENT APPLICATION NUMBER: US/09/700,820C
CURRENT FILING DATE: 2000-11-20
PRIOR APPLICATION NUMBER: DT/JP99/02341
PRIOR APPLICATION NUMBER: DF/10/138652
PRIOR APPLICATION NUMBER: JP 10/138652
PRIOR APPLICATION NUMBER: JP 10/279876
PRIOR FILING DATE: 1998-05-20
PRIOR APPLICATION NUMBER: JP 10/279876
PRIOR FILING DATE: 1998-10-01
                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                              문
                                                                                                                                                       뮹
                                                                                                                                                                                              ર્
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-667-289-2 (1-629) x US-09-700-820C-17 (1-2995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-700-820C-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 39 SEQ ID NO 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17, Application US/09700820C Patent No. 6610485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 29
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Mus musculus FEATURE: NAME/KEY: CDS LOCATION: (29)..(2839)
                                                                                                                                                                                                                                                                                                                                  317 GAGCAGGTCACTGTCATCAACAGAACCACGTCCAGGTGTCACGTTCACAGACGTGGTCCTC
                                                                                                                                                                                                                                                     377
                                     155 AspThrLysTyrValValHisValLysSerLeuGluThrGluGluGlu-------
                                                                                                                      135 IleTyrGluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyrIle 154
                                                                                                                                                                  434 TATGGAGTCACCATGCTTTCAGGCTTTCCTCCAGATAAACCTACAAATTTGACTTGCATT
                                                                                                                                                                                                       115 CysGlyLysAspIleSerSerGlyTyrProProAspIleProAspGluValThrCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                     218 TTCACTGCCATTTGTGTGCTGAAGGAGGCGTGTCTGCAG------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         161 TIGGAACCGTGTGGTTACATCTACCCTGAA---TITCCAGTTGTCCAGCGCGGGCTCGAAC
                                                                                                                                                                                                                                                                                                                                                          75 PheGlnIleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                        65 HisPheTyrLysAsn-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              48 IleSerIleTyrCys------GlnAlaAlaIleLysAsnCysGlnProArgLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28 IleAsnCysSerGlyHisIleTrpValGluProAlaThrIlePheLysMetGlyMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 TrpAspAlaValIleAlaLeuTyrIleLeuPheSerTrpCysHisGlyGlyIleThrAsn
GAAACAAACTACACT----
                                                                                                                                                                                                                                                 CCGAGCGTGCAGCTCACCTGCAACATCCTGTCCTTTGGGCAGATCGAGCAGAAT---GTG
                                                                                                                                                                                                                                                                                          ProHisAlaSerMetTyrCysThrAlaGluCysProLysHisPheGlnGluThrLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGCTAGCGCAAGCTTTGCTTTTTTCCTCACCACTGAATCTATAGGTCAACTT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.1e-17
256.50
43.3%
24.8%
                                                                                   -GGGAAGAATATGCTGTGCCAGTGGGACCCCGGAAGGGAAGACTTACCTT
-TTGAAATCAGAGTGGGCAACAGAGAAGTTTCCTGATTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----GlyIleLyвGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
                                                                                                                                                                                                           134
                                                                                                                                                                                                                                                                                          114
                                                                                                                                                                                                                                                                                                                                      376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  64
                                         170
                                                                                                                                                                  493
                                                                                                                                                                                                                                                   433
                                                                                                                                                                                                                                                                                                                                                                              94
                                                                                                                                                                                                                                                                                                                                                                                                                                                               74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27
  602
                                                                                   550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            217
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-685-118-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1, Applic
Patent No. 5840530
                                                                              TELEFAX: (201) 235-2363
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                              ATTORNEY AGENT INFORMATION:
NAME: Silverman, Robert A.
REGISTRATION NUMBER: 35,682
REFERENCE/DOCKET NUMBER: CD 9
TELECOMMUNICATION INFORMATION:
TELEPHONE: (201) 235-2863
                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IEM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/685,118

FILING DATE:

FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Gubler, Ulrich A
APPLICANT: Presky, David H
TITLE OF INVENTION: RECEPTORS FOR HUMAN IL-12
NUMBER OF SEQUENCES: 4
                                                         SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                LENGTH: 4040 base pairs TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
ZIP: 07110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE: NJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Nutley
STRANDEDNESS:
                                                                                                                                                                                                                                           CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1028 GAGGCTAGTGGGACCÁCATACGAAGACAGACCA 1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        271 AspThrAsnPheThrTyrValGlnGlnSerGluPheTyrLeuGluProAsnIleLysTyr 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            806 ---CTATCATGGGTCAGTTCAGGGCTGGGCGGTCTTTAGATCTAAAGTCTGACATCCAA 862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    291 ValPheGlnValArg---CysGlnGluThrGlyLysArgTyrTrpGlnProTrpSerSer 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             923 CGAACTTCCTTCACT---GTGCAGGAC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              863 TATAGGACCAAAGATGCCTCAACTTGGATCCAGGTCCCTCTTGAAGATACAATGTCTCCT 922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    239 IleIleTyrTrpAspSerGlnThrThr-----IleGluLysValSerCysGluMetArg 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     171 -----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   222 AlaAlaVal------IleSerArgAlaGluThrIleAsnAlaThrValProLysThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    202 LeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleValIleProSer 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsnAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/08685118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProPhePheHisLysThrProGluThrValPro 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TyrLysAlaThrThrAsnGlnThrTrp------AsnValLysGluPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCACCATATAATTTATCAGTGACCAACTCAGAAGAATTATCCAGTATATTAAAG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTGGGAAGGTCTCCTCAGAGTCTATCAATTTTGACCCCGTGGATAAAGTGAAACCCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGTCAAAGCATGGCACTTCATGTATGGTCAGCTACATGCCCCACCTATTATGTCAACATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          340 Kingsland Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hoffmann-La Roche
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----GlnGlnTyrLeuThrSerSerTyrIleAsnIle
                                                                                                                                                             9195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -----GTCTGGGTGGAAGCAGAGAATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -CTCAAGCCTTTTACAGAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 664
```

TOPOLOGY:

linear

```
ई
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
                                    밁
                                                                ક
                                                                                                       유
                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ई
                                                                                                                                      8
                                                                                                                                                                         밁
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               श्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-667-289-2 (1-629)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-685-118-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HYPOTHETICAL:
ANTI-SENSE: N
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            No . :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY:
                                    1391 CTGGTA-----CTGCTTAATCGACTCAGATATCGGCCCAGTAACAGCAGGCTCTGGAAT
                                                                                                                                                                             1271 TCACTTCCATCCACATTCACATTCTTGGACATAGTGAGGCCTCTTCCTCCGTGGGACATT 1330
                                                                                                                                                                                                                                                                                                                     1157 TGTAAAGACATTTATTGTGACTATTTGGACTTTGGAATCAACCTCACCCCTGAATCACCT 1216
                                                                                                                                                                                                                                                                                                                                                                                           1097 TTATACÁCTGAGTÁTACTCTACAGCTAAGTGGACCAÁÁÁAATTTÁACCTGGCAGAAGCAA
                                                                                                                                                                                                                                                                           187 GlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsnAlaLeuGlyMetGluGlu
                                                                                                                                                                                                                                                                                                                                                        977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            731 GGCGATGTGACTGTGAAGCCTTCCCCATGTAATTTTACTTGGATCCACTGTCAATATTACA 790
267 ValLysGluPheAspThrAsnPheThrTyrVal-----GlnGlnSerGluPheTyrLeu
                                                                                                                                          227
                                                                                                                                                                                                                                                                                                                                                                                                                            154 IleAspThrLysTyrValValHisVal------LysSerLeuGluThrGluGluGlu 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                134 VallleTyrGluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyr 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     114 IleCysGlyLysAspIleSerSerGlyTyrProProAspIleProAspGluValThrCys 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                860 GACAGAAGAATCAATTTTCACCATGGCCACTCCCTCAATTCTCAAGTCACAGGTCTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      809 CAAGGCTGCTTTCACTATTCCÁGÁCGTÁÁCAAGTTA-----ATCCTGTÁCAAGTTT 859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          791 TGC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     52 CysGlnAlaAlaIleLysAsnCysGlnProArgLysLeuHisPheTyrLysAsnGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     72 LysGluArgPheGlnIleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLys---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             32 GlyHisIleTrpValGluProAlaThrIlePheLysMetGlyMetAsnIleSerIleTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----AsnPheLeuGluProHisAla------
                                                                    ThrIleGluLysValSerCysGluMetArgTyrLysAlaThrThrAsnGlnThrTrpAsn 266
                                                                                                                                          ArgAlaGluThrileAsnAlaThrValProLysThrileIleTyrTrpAspSerGlnThr 246
                                                                                                                                                                                                              SerLysGlnLeuGlnIleHisLeuAspAspIleValIleProSerAlaAlaValIleSer
                                                                                                                                                                                                                                                     GAA-----TCCAATTTCACAGCCAAGGTTACTGCTGTCAATAGTCTTGGAAGCTCCTCT 1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATACAGAAGGGAGACAGGGGACTGTGGCCTGCGCACCTGGGAAAGAGGACGACGACACCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTGGTACAACCTTGTTTTGTCTGCAAACTGGCCTGT---ATCAATAGTGATGAAATTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----SerMetTyrCysThrAlaGluCysProLysHisPheGlnGluThrLeu 113
                                                                                                          AGAATCAAATTTCAAAAGGCTTCCGTGAGCAGATGTACCCCTTTATTGGAGAGATGAGGGA 1390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATATGTGGAGCAGAGATCTTCGTTGGTGTTGCTCCAGAACAGCCTCAAAATTTATCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDS
641..3226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ĕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ĕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6.13e-13
216.00
41.6%
23.7%
6.5%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                x US-08-685-118-1 (1-4040)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -TCTTTGAAGCCCAGA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4040
75
57
131
54
                                                                                                                                                                                                                                                                                                                                                                                             1156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               51
   284
                                      1444
                                                                                                                                                                                                                  226
                                                                                                                                                                                                                                                                                      206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1036
```

```
RESULT 4
US-08-915-495-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
무
                           8
                                                                US-10-667-289-2 (1-629) x US-08-915-495-1 (1-4040)
                                                                                                                 Query Match:
                                                                                                                                 Best Local Similarity:
                                                                                                                                                                                                                                    US-08-915-495-1
                                                                                                                                                  Percent Similarity:
                                                                                                                                                                    Score
                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1
Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: (201) 235-2863
TELEFAX: (201) 235-2363
INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDLUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARB: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/915,495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Gubler, Ulrich A
APPLICANT: Preeky, David H
TITLE OF INVENTION: RECEPTORS FOR HUMAN IL-12
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Hoffmann-La Roche Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/6
FILING DATE:
ATTORNSY/AGENT INFORMATION:
NAME: Silverman, Robert
                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                       ANTI-SENSE:
                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: CI
                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                   ŏ
:
                                                                                                                                                                                                                                                                      NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                  TYPE: nucleic
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: CD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZIP: 07110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: Nutley
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET:
                                                                                                                                                                                                                                                    LOCATION:
                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                     ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1493 AAACCATTTACAGAATATGAATTTCAGATTTCCTCTAAGCTACATCTTTATAAGGGAAGT 1552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1445 ATG------GTTAATGTTACAAAGGCCAAAGGAAGACATGATTTGCTGGATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                304 TrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro 320
731 ĠĠĊĠATGTĠACTĠĬĠAAGĊĊĬTCCCATGTAATTTTACTTĠĠATCCACTGTCAATATTACA 790
                             32 GlyHisIleTrpValGluProAlaThrIlePheLysMetGlyMetAsnileSerileTyr 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1, Application US/08915495
5852176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGAGTGATTGGAGTGAATCATTGAGAGCACAAACACCAGAAGAAGAGCCT 1603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GluproAsnIleLysTyrValpheGlnValArgCysGln---GluThrGlyLysArgTyr 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            골
                                                                                                                                                                                                                                                                                                                                                                                                   4040 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               340 Kingsland Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              USA
                                                                                                                                                                                                                                                                                                       ĕ
                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                      641..3226
                                                                                                                                                                                                                                                                                                                                        CDNA
                                                                                                                                                                                                                                                                                                                                                                      double
                                                                                                                                                                                                                                                                                                                                                                                       acid
                                                                                                 6.13e-13
216.00
41.6%
23.7%
6.5%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08/685,118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9195
                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
                                                                                                                   Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                #1.30
                                                                                                 4040
75
57
131
54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1492
```

밁 δ 밁 5

문

```
RESULT 5
US-08-914-520-1
             GENERAL INFORMATION:
APPLICANT: Gubler, Ulrich A
APPLICANT: Greeky, David H
TITLE OF INVENTION: RECEPTORS FOR
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: HOffmann-La Roche In
STREET: 340 Kingsland Street
                                                                                                                                                                                           Sequence 1, Application US/08914520 Patent No. 5919903
STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1037
                                                                                                                                                                                                                                                                                                         1553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   171 GlnGlnTyrLeuThrSerSerTyr-------IleAsnIleSerThrAspSerLeu 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            267 ValLysGluPheAspThrAspPheThrTyrVal-----GlnGlnSerGluPheTyrLeu 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            154 IleAspThrLysTyrValValHisVal-----LysSerLeuGluThrGluGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   134 VallleTyrGluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyr 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             72 LysGluArgPheGlnIleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLys---
Nutley
                                                                                                                                                                                                                                                                                                         TGGAGTGATTGGAGTGAATCATTGAGAGCACAAACACCAGAAGAAGAGCCT 1603
                                                                                                                                                                                                                                                                                                                                                TrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                AAACCATTTACAGAATATGAATTTCAGATTTCCTCTAAGCTACATCTTTATAAGGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                     GluproAsnIleLysTyrValPheGlnValArgCysGln---GluThrGlyLysArgTyr 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrIleGluLysValSerCysGluMetArgTyrLysAlaThrThrAsnGlnThrTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ArgAlaGluThrIleAsnAlaThrValProLysThrIleIleTyrTrpAspSerGlnThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCACTTCCATCCACATTCACATTCTTGGACATAGTGAGGCCTCTTCCTCCGTGGGACATT 1330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerLysGlnLeuGlnIleHisLeuAspAspIleValIleProSerAlaAlaValIleSer 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAA----TCCAATTTCACAGCCAAGGTTACTGCTGTCAATAGTCTTGGAAGCTCCTCT 1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsnAlaLeuGlyMetGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGTAAAGACATTTATTGTGACTATTTGGACTTTGGAATCAACCTCACCCCTGAATCACCT 1216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTATACACTGAGTATACTCTACAGCTAAGTGGACCAAAAAATTTAACCTGGCAGAAGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATACAGAAGGGAGACAGGGGACTGTGGCCTGCGCACCTGGGAAAGAGGACGAGACACCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IleCysGlyLysAspIleSerSerGlyTyrProProAspIleProAspGluValThrCys 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACAGAAGAATCAATTTTCACCATGGCCACTCCCTCAATTCTCAAGTCACAGGTCTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAGGCTGCTTTCACTATTCCAGACGTAACAAGTTA-----ATCCTGTACAAGTTT 859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CysGlnAlaAlaIleLysAsnCysGlnProArgLysLeuHisPheTyrLysAsnGlyIle
||| ::: :::||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGTA----CTGCTTAATCGACTCAGATATCGGCCCAGTAACAGCAGGCTCTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGAATCAAATTTCAAAAAGGCTTCCGTGAGCAGATGTACCCCTTTATTGGAGAGATGAGGGA 1390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATATGTGGAGCAGAGATCTTCGTTGGTGTTGCTCCAGAACAGCCTCAAAATTTATCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTGGTACAACCTTGTTTGTCTGCAAACTGGCCTGT---ATCAATAGTGAAAATTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -----AsnPheLeuGluProHisAla-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGC-----TCTTTGAAGCCCAGA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ----SerMetTyrCysThrAlaGluCysProLysHisPheGlnGluThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ----GTTAATGTTACAAAGGCCAAAGGAAGACATGATTTGCTGGATCTG
                                                                                                         FOR
                                         Inc
                                                                                                           NAMUH
                                                                                                           IL-12
                                                                                                                                                                                                                                                                                                                                                    320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                ঠ
                                                                                  뭐
                                                                                                                         S
                                                                                                                                                                         밁
                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-667-289-2 (1-629) x US-08-914-520-1 (1-4040)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-914-520-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: Silverman, Robert A.
REGISTRATION NUMBER: 35,682
REFERENCE/DOCKET NUMBER: CD 5
TELECOMMUNICATION INFORMATION:
TELEPHONE: (201) 235-2863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (201) 235-2363
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 4040 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ANTI-SENSE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Хо
::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/08/914,520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: nucleic acid
  1037
                                           134
                                                                                                                                                                           920
                                                                                                                                                                                                                                                                                                                                                    608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              731 GGCGATGTGACTGTGAAGCCTTCCCATGTAATTTTACTTGGATCCACTGTCAATATTACA 790
                                                                                                                                                                                                                                                                                                                                                                                                                                           791 TGC----
                                                                                                                                                                                                                                                                                                         91
                                                                                                                                                                                                                                                                                                                                                                                     72 LysGluArgPheGlnIleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLys---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  52 CYSGlnAlaAlaIleLysAsnCysGlnProArgLysLeuHisPheTyrLysAsnGlyIle 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     32 GlyHisIleTrpValGluProAlaThrIlePheLysMetGlyMetAsnIleSerIleTyr 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07110
                                ValileTyrGluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyr 153
  ATACAGAAGGGAGAACAGGGGACTGTGGCCTGCACCTGGGAAAGAGGACGACACACCCAC 1096
                                                                                                                             IleCysGlyLysAspIleSerSerGlyTyrProProAspIleProAspGluValThrCys 133
                                                                                                                                                                           CTTGGTACAACCTTGTTTGTCTGCAAACTGGCCTGT---ATCAATAGTGATGAAATTCAA 976
                                                                                                                                                                                                                                                                                                       ------AsnPheLeuGluProHisAla------
                                                                                                                                                                                                                                                                                                                                                    CAAGGCTGCTTTCACTATTCCAGACGTAACAAGTTA----ATCCTGTACAAGTTT
                                                                                    ATATGTGGAGCAGAGATCTTCGTTGGTGTTGCTCCAGAACAGCCTCAAAATTTATCCTGC 1036
                                                                                                                                                                                                                                                                  GACAGAAGAATCAATTTTCACCATGGCCACTCCCTCAATTCTCAAGTCACAGGTCTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      골
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ĕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6.13e-13
216.00
41.6%
23.7%
6.5%
                                                                                                                                                                                                                  ---SerMetTyrCysThrAlaGluCysProLysHisPheGlnGluThrLeu 113
                                                                                                                                                                                                                                                                                                                                                                                                                                           -----TCTTTGAAGCCCAGA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08/685,118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #1.30
                                                                                                                                                                                                                                                                                                                                                       859
                                                                                                                                                                                                                                                                                                                                                                                                90
                                                                                                                                                                                                                                                                  919
                                                                                                                                                                                                                                                                                                              97
```

5

밁 5 멍

무 8 밁 á 밁 5 8 ક 밁 Ś

밁 ঠ 밁 ঠ 밁 ર્ક 밁 S 밁

र् 밁 δ 문 र् 밁

```
APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASE
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/331,498
PRIOR FILING DATE: 2000-09-09
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 6
US-09-949-016-1887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   당
                                     US-10-667-289-2 (1-629) x US-09-949-016-1887 (1-4040)
                                                                           Query Match:
DB:
                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           음 중
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             중 음
                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                   US-09-949-016-1887
                                                                                                                                                                                                                                                                                                               SEQ ID NO 1887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent No. 6812339
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1887, Application US/09949016 Patent No. 6812339
                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                           LENGTH: 4040
                                                                                                                                                                           No:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAACCATTTACAGAATATGAATTTCAGATTTCCTCTAAGCTACATCTTTATAAGGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ValLysGluPheAspThrAsnPheThrTyrVal-----GlnGlnSerGluPheTyrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAA----TCCAATTTCACAGCCAAGGTTACTGCTGTCAATAGTCTTGGAAGCTCCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAslaAsnAlaLeuGlyMetGluGlu ::: ||| || |||:::||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlnGlnTyrLeuThrSerSerTyr----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTATACACTGAGTATACTCTACAGCTAAGTGGACCAAAAATTTAACCTGGCAGAAGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluproAsnIleLysTyrValPheGlnValArgCysGln---GluThrGlyLysArgTyr 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATG-----GTTÄÄTGTTÄCÄÄÄGGCCAÄÄGGACATGATTTGCTGGATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGTA----CTGCTTAATCGACTCAGATATCGGCCCAGTAACAGCAGGCTCTGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ThrileGluLysValSerCysGluMetArgTyrLysAlaThrThrAsnGlnThrTrpAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ArgAlaGluThrIleAsnAlaThrValProLysThrIleIleTyrTrpAspSerGlnThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCACTTCCATCCACATTCACATTCTTGGACATAGTGAGGCCTCTTCCTCCGTGGGACATT 1330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerLysGlnLeuGlnIleHisLeuAspAspIleValIleProSerAlaAlaValIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGTAAAGACATTTATTGTGACTATTTGGACTTTGGAATCAACCTCACCCCTGAATCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGAATCAAATTTCAAAAGGCTTCCGTGAGCAGATGTACCCTTTATTGGAGAGATGAGGGA 1390
 GlyHisIleTrpValGluProAlaThrIlePheLysMetGlyMetAsnIleSerIleTyr 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGAGTGATTGGAGTGAATCATTGAGAGCACAAACACCAGAAGAAGAGCCT
                                                                                                                                                       6.13e-13
216.00
                                                                           41.6%
23.7%
6.5%
3
                                                                                               Conservative: Mismatches: Indels:
                                                                                                                                                       Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -----IleAsnIleSerThrAspSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ASSOCIATED
OF DETECTION
                                                                         4040
75
57
131
54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AND USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 र्ठ
                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                 र्
                                                                                                                                                                                                                                                                                                                                                                                                                                             F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                       US-09-543-679A-2896
                                                       Sequence 2896, Application Patent No. 7034007
GENERAL INFORMATION:
APPLICANT: NYCE, Jon
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1157
                                                                                                                                                                                                                                                                                           1493
                                                                                                                                                                                                                                                                                                                                                                       1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1391
                                                                                                                                                                                                                                                     304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     154 IleAspThrLysTyrValValHisVal------LysSerLeuGluThrGluGluGlu 170
                                                                                                                                                                                                                                                                                                                               285 GluproAsnIleLysTyrValPheGlnValArgCysGln---GluThrGlyLysArgTyr 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   134 ValileTyrGluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyr 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             731 GGCGATGTGACTGTGAAGCCTTCCCATGTAATTTTACTTGGATCCACTGTCAATATTACA 790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     52 CysGlnAlaAlaIleLysAsnCysGlnProArgLysLeuHisPheTyrLysAsnGlyIle 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               72 LysGluArgPheGlnIleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLys---
                                                                                                                                                                                                                                                                                           AAACCATTTACAGAATATGAATTTCAGATTTCCTCTAAGCTACATCTTTATAAGGGAAGT 1552
                                                                                                                                                                                                                                                                                                                                                                                                         ValLysGluPheAspThrAsnPheThrTyrVal-----GlnGlnSerGluPheTyrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCACTTCCATCCACATTCACATTCTTGGACATAGTGAGGCCTCTTCCTCCGTGGGACATT 1330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsnAlaLeuGlyMetGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGTAAAGACATTTATTGTGACTATTTGGAACTTTGGAATCAACCTCACCCCTGAATCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTATACACTGAGTATACTCTACAGCTAAGTGGACCAAAAAATTTAACCTGGCAGAAGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATACAGAAGGGAGAACAGGGGACTGTGGCCCTGCACCTGGGAAAGAGGACGAGACACCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ileCysGlyLysAspIleSerSerGlyTyrProProAspIleProAspGluValThrCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACAGAAGAATCAATTTTCACCATGGCCACTCCCTCAATTCTCAAGTCACAGGTCTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----AsnPheLeuGluProHisAla-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAAGGCTGCTTTCACTATTCCAGACGTAACAAGTTA-----ATCCTGTACAAGTTT
                                                                                                                                                                                                                 TGGAGTGATTGGAGTGAATCATTGAGAGCACAAACACCAGAAGAAGAAGCCCT
                                                                                                                                                                                                                                                     TrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro 320
                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGTA-----CTGCTTAATCGACTCAGATATCGGCCCAGTAACAGCAGGCTCTGGAAT 1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ArgAlaGluThrIleAsnAlaThrValProLysThrIleIleTyrTrpAspSerGlnThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerLysGlnLeuGlnIleHisLeuAspAspIleValIleProSerAlaAlaValIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAA-----TCCAATTTCACAGCCAAGGTTACTGCTGTCAATAGTCTTGGAAGCTCCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATATGTGGAGCAGAGATCTTCGTTGGTGTTGCTCCAGAACAGCCTCAAAATTTATCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTGGTACAACCTTGTTTGTCTGCAAACTGGCCTGT---ATCAATAGTGATGAAATTCAA 976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGC-----TCTTTGAAGCCCAGA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----SerMetTyrCysThrAlaGluCysProLysHisPheGlnGluThrLeu
               Jonathan W.
ON: LOW ADENOSINE ANTI-SENSE OLIGONUCLEOTIDE,
COMPOSITIONS, KIT & METHOD FOR TREATMENT
OF AIRWAY DISORDERS ASSOCIATED WITH
                                                                                                                                                                                                                                                                                                                                                                       ----GTTAATGTTACAAAGGCCAAAGGAAGACATGATTTGCTGGATCTG
                                                                                                                                       US/09543679A
   BRONCHOCONSTRICTION,
```

1270

1492

1156

1096

1036 133 97 859 90

```
밁
                                                                                         8
                                                                                                                                                                 Ş
                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; SEQUENCE DESCRIPTION: US-09-543-679A-2896
                                                                                                                                     밁
                                                                                                                                                                                                                                                                                           뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-667-289-2 (1-629) x US-09-543-679A-2896 (1-4040)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 2896:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Amzel, Viviana
REGISTRATION NUMBER: 30,930
REFERENCE/DOCKET NUMBER: EPI-0067191b
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-409-3035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/127,958
FILING DATE: 1998-08-03
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/543,679A
FILING DATE: 13-Apr-2000
CLASSIFICATION: UNKNOWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 3111
CORRESPONDENCE ADDRESS:
134 VallleTyrGluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyr ::: |||||:::
                                                                                                                                                                                                                860 GACAGAAGAATTTTCACCATGGCCACTCCCTCAATTCTCAAGTCACAGGTCTTCCC
                                                                                                                                                                                                                                                                                           608
                                                                                                                                                                                                                                                                                                                                                                        791
                                                                                                                                                                                                                                                                                                                                                                                                                                                 731 GGCGATGTGAGCTGTGAAGCCTTCCCATGTAATTTTACTTGGATCCACTGTCAATATTACA 790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity:
                                                                                                                                                                                                                                                                                                                             72 LysGluArgPheGlnIleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLys---
                                                                                                                                                                                                                                                                                                                                                                                                          52 CysGlnAlaAlaIleLysAsnCysGlnProArgLysLeuHisPheTyrLysAsnGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     32 GlyHisIleTrpValGluProAlaThrIlePheLysMetGlyMetAsnIleSerIleTyr
                                                          ATATGTGGAGCAGAGATCTTCGTTGGTGTTGCTCCAGAACAGCCTCAAAATTTATCCTGC
                                                                                             IleCysGlyLysAspIleSerSerGlyTyrProProAspIleProAspGluValThrCys
                                                                                                                                     CAAGGCTGCTTTCACTATTCCAGACGTAACAAGTTA-----ATCCTGTACAAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM Compatible OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: EPIGENESIS PHARMACEUTICALS, STREET: 7 Clarke Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 4040 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 413-254-9245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 08512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: NJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Cranbury
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6.13e-13
216.00
41.6%
23.7%
6.5%
                                                                                                                                                                         ---SerMetTyrCysThrAlaGluCysProLysHisPheGlnGluThrLeu
                                                                                                                                                                                                                                                    -AsnPheLeuGluProHisAla-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CD-R
                                                                                                                                                                                                                                                                                                                                                                    ----TCTTTGAAGCCCAGA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ĕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2896:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4040
75
57
131
54
13
                                                                                                                                                                                                                                                                                                                                                                        153
                                                                                                 133
                                                                                                                                       976
                                                                                                                                                                         113
                                                                                                                                                                                                                                                                                                                                 90
                                                                                                                                                                                                                                                                                                                                                                                                            71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       51
                                                          1036
                                                                                                                                                                                                                919
                                                                                                                                                                                                                                                      97
                                                                                                                                                                                                                                                                                           859
                                                                                                                                                                                                                                                                                                                                                                      808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-543-679A-2897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 2897, Applicat
Patent No. 7034007
GENERAL INFORMATION:
APPLICANT: NYCE,
                                                                                                                                   CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/543,679A
FILING DATE: 13-Apr-2000
CLASSIFICATION: UNKNOWN
PRIOR APPLICATION DATA:
  NAME: Amzel, Viviana
REGISTRATION NUMBER: 30,930
REFERENCE/DOCKET NUMBER: EP
TELECOMMUNICATION INFORMATION:
                                                                          APPLICATION NUMBER: 60/127,958 FILING DATE: 1998-08-03 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                         ZIP: 08512
COMPUTER READABLE FORM:
MEDIUM TYPE: CD-R
                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 3111
CORRESPONDENCE ADDRESSES ENGRESSES PHARMACEUTICALS,
STREET: 7 Clarke Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: LOW ADENOSINE ANTI-SENSE OLIGONUCLEOTIDE, COMPOSITIONS, KIT & METHOD FOR TREATMENT OF AIRWAY DISORDERS ASSOCIATED WITH BRONCHOCONSTRICTION, LUNG INFLAMMATION, NUMBER OF SEQUENCES: 3111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1037 ATACAGAAGGGAGAACAGGGGACTGTGGCCTGCACCTGGGAAAGAGGACGAGACACCCAC 1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       285 GluproAsnIleLysTyrValPheGlnValArgCysGln---GluThrGlyLysArgTyr 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   247 ThrIleGluLysValSerCysGluMetArgTyrLysAlaThrThrAsnGlnThrTrpAsn 266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAA----TCCAATTTCACAGCCAAGGTTACTGCTGTCAATAGTCTTGGAAGCTCCTCT 1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE: NJ
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGAGTGATTGGAGTGAATCATTGAGAGCACAAACACCAGAAGAAGAAGCCCT 1603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAACCATTTACAGAATATGAATTTCAGATTTCCTCTAAGCTACATCTTTATAAGGGAAGT 1552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATG------GTTAATGTTACAAAGGCCAAAGGAAGACATGATTTGCTGGATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ValLysGluPheAspThrAsnPheThrTyrVal-----GlnGlnSerGluPheTyrLeu 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGGTA----CTGCTTAATCGACTCAGATATCGGCCCAGTAACAGCAGGCTCTGGAAT 1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ArgAlaGluThrIleAsnAlaThrValProLysThrIleIleTyrTrpAspSerGlnThr 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCACTTCCATCCACATTCACATTCTTGGACATAGTGAGGCCTCTTCCTCCGTGGGACATT 1330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerLysGlnLeuGlnIleHisLeuAspAspIleValIleProSerAlaAlaValIleSer 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsnAlaLeuGlyMetGluGlu 206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGTAAAGACATTTATTGTGACTÄTTTGGACTTTTGGAATCÄÄCCTCACCCCTGAATCÄCCCT 1216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTATACACTGAGTATACTCTACAGCTAAGTGGACCAAAAAATTTAACCTGGCAGAAGCAA 1156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IleAspThrLysTyrValValHisVal------LysSerLeuGluThrGluGluGlu 170
                                                                                                                                                                                                                                    SOFTWARE: N/A
                                                                                                                                                                                                                                                    COMPUTER: IBM COMPOPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                        CITY: Cranbury
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGAATCAAATTTCAAAAGGCTTCCGTGAGCAGATGTACCCTTTATTGGAGAGATGAGGGA 1390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/09543679A
                                                                                                                                                                                                                                                                         IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Jonathan W.
                        EPI-0067191b
```

```
ई
                                                                       밁
                                                                                                     र्
                                                                                                                                                  밁
                                                                                                                                                                            ð
                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-667-289-2 (1-629) x US-09-543-679A-2897 (1-6019)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE DESCRIPTION: US-09-543-679A-2897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 2897:
SEQUENCE CHARACTERISTICS:
LENGTH: 6019 base pairs
TYPE: nucleic acid
STRANDENNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ŏ
                                                                                                                                                                                                                            3196
                                                                                                                                                                                                                                                                                                                                                                                 3076 TTATACACTGAGTATACTCTACAGCTAAGTGGACCAAAAAATTTAACCTGGCAGAAGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                              3016 ATACAGAAGGGAGAACAGGGGACTGTGGCCTGCACCTGGGAAAGAGGACGAGACACCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2710 GGCGATGTGACTGTGAAGCCTTCCCATGTAATTTTACTTGGATCCACTGTCAATATTACA 2769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2788 CAAGGCTGCTTTCACTATTCCÁGÁCGTAÁCÁÁGTTA-----ATCCTGTÁCAÁGTTT 2838
                                                                                                                                                                                        207
                                                                                                                                                                                                                                                                                                                                                                                                                    154 IleAspThrLysTyrValValHisVal------LysSerLeuGluThrGluGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                134 VallleTyrGluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyr 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       114 IleCysGlyLysAspIleSerSerGlyTyrProProAspIleProAspGluValThrCys 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           72
                             ThrileGluLysValSerCysGluMetArgTyrLysAlaThrThrAsnGlnThrTrpAsn 266
                                                                                                                                                                                      SerLysGlnLeuGlnIleHisLeuAspAspIleValIleProSerAlaAlaValIleSer 226
                                                                                                                                                                                                                              GAA-----TCCAATTTCACAGCCAAGGTTACTGCTGTCAATAGTCTTGGAAGCTCCTCT 3249
                                                                                                                                                                                                                                                                GlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsnAlaLeuGlyMetGluGlu
                                                                                                                                                                                                                                                                                                       TGTAAAGACATTTATTGTGACTATTTGGACTTTTGGAATCAACCTCACCCCTGAATCACCT 3195
                                                                                                                                                                                                                                                                                                                                         GlnGlnTyrLeuThrSerSerTyr-------IleAsnIleSerThrAspSerLeu 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATATGTGGAGCAGAGATCTTCGTTGGTGTTGCTCCAGAACAGCCTCAAAATTTTATCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTGGTACAACCTTGTTTGTCTGCAAACTGGCCTGT---ATCAATAGTGAAATTCAA 2955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACAGAAGAATTTTCACCATGGCCACTCCCTCAATTCTCAAGTCACAGGTCTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -----AsnPheLeuGluProHisAla------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LysGluArgPheGlnIleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLys---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGC-----TCTTTGAAGCCCAGA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CysGlnAlaAlaIleLysAsnCysGlnProArgLysLeuHisPheTyrLysAsnGlyIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlyHisIleTrpValGluProAlaThrIlePheLysMetGlyMetAsnIleSerIleTyr
CTGGTA----CTGCTTAATCGACTCAGATATCGGCCCCAGTAACAGCAGGCTCTGGAAT
                                                                         AGAATCAAATTTCAAAAGGCTTCCGTGAGCAGATGTACCCTTTATTGGAGAGATGAGGGA 3369
                                                                                                             ArgAlaGluThrIleAsnAlaThrValProLysThrIleIleTyrTrpAspSerGlnThr 246
                                                                                                                                                  TCACTTCCATCCACATTCACATTCTTGGACATAGTGAGGCCTCTTCCTCCGTGGGACATT 3309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: 609-409-3035
TELEFAX: 413-254-9245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----SerMetTyrCysThrAlaGluCysProLysHisPheGlnGluThrLeu 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.2e-12
216.00
41.6%
23.7%
6.5%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2897:
                                                                                                                                                                                                                                                                                                                                                                                   3135
                                                                                                                                                                                                                                                                                                                                                                                                                        170
                                                                                                                                                                                                                                                                                                                                                                                                                                                              3075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2898
                                                                                                                                                                                                                                                                   206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           90
```

24 GlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThrIlePheLys

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 9
US-08-825-558-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                      Percent Similarity:
Best Local Similarity:
US-10-667-289-2 (1-629) x US-08-825-558-5 (1-2754)
                                                   Query Match:
                                                                                                                                           Alignment Scores:
                                                                                                                                                                                  US-08-825-558-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 5, Application US/08825558 Patent No. 5965724
                                                                                                                                                                                                                                                                                                                             TELEFAX: (202)371-2540
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 2754 base pair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08
FILING DATE: 19-MAR-1997
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: ESMOND, ROBERT W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: I
CORRESPONDENCE ADDRESS: STERNE, K
                                                                                                                                                                                                                                      MOLECULE TYPE:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER: 32,893
REFERENCE/DOCKET NUMBER: 06
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: SMITH, STEPHEN K.
APPLICANT: DELLOW, KIMBERLEY A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: Gp 130 Lacking the Transmembrane Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                             No.:
                                                                                                                                                                                                    NAME/KEY:
                                                                                                                                                                                                                                                                                         STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 20005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: WASHINGTON STATE: DC
                                                                                                                                                                                                                                                                            TOPOLOGY:
                                                                                                                                                                                                                                                                                                            TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3424 ATG-----GTTÄÄTGTTÄCÄAAGGCCAAAGGAAGACATGATTTGCTGGATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     304 TrpGlnProTrpSerSerProPhePheHisLysThrProGluThrValPro 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             285 GluProAsnIleLysTyrValPheGlnValArgCysGln---GluThrGlyLysArgTyr 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                267 ValLysGluPheAspThrAspPheThrTyrVal-----GlnGlnSerGluPheTyrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGAGTGATTGGAGTGAATCATTGAGAGCACAAACACCAGAAGAAGAGCCT 3582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ANACCATTTACAGAATATGAATTTCAGATTTCCTCTAAGCTACATCTTTATAAGGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1100 NEW YORK AVENUE
                                                                                                                                                                                                                                                                                                                               2754 base pairs
                                                                                                                                                                                                                                                                                                                                                                                         (202)371-2540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SHARKEY, ANDREW
                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                           both
                                    1.16e-12
211.00
32.7%
19.4%
6.3%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KESSLER, GOLDSTEIN & FOX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US/08/825,558
                                                                                                                                                                                                                                                                                                                                                                     5:
                                                                                                                                                                                                                                                                                                                                                                                                                                              0623.0530001
                                                     Conservative: Mismatches: Indels:
                                                                                                          Length:
Matches:
                                  Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3471
```

293 GINValArgCysGInGluThrGlyLysArgTyrTrpGlnProTrpSerSer 309 :::::	AAGCCCAATCCGCCACATAATTTATCAGTGATCAACTCAGAGGAACTGTCTAGTATCTTA ProlysThr1le1leTyrTrpaspSerGlnThrThr1leGluLysValSerCys	### 110 PARA COLUMN COL	74 ArgPheGlnIleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeu 93 :::::: :::	
1912 CTGTTCTGCTTTAATAAGCGAGACCTAATTAAAAACACATCTGGCCTAAT 480 LeuAsnThrGlyTyrLysProGlnIleSer	Db 1672 TATAGAACCATCATTGGAAATGAAACTGCTGTGAATGTGGATTCTTCCCACAGAATAT 1731 Qy 476	Qy 433 MetileThrGlu		1072 GAAGO 337 1132 CAAAA 353 ASPII 1186

```
; NAME/KEY:
; LOCATION:
US-09-312-611-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ર્શ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-312-611-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 5, Application US/09312611 Patent No. 6380160
                                                                                                                                                                                                            APPLICATION UMBER: US/09/312
FILING DATE: 17-MAY-1999
CLASSIFICATION: 800
ATTORNEY/AGENT INFORMATION:
NAME: ESMOND, ROBERT W.
REGISTRATION NUMBER: 32,893
REFERENCE/DOCKET NUMBER: 0623
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)371-2600
                                                                                                                                                          TELEFAX: (202)371-2540
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: SHARKEY, ANDREW
APPLICANT: SMITH, STEPHEN K.
APPLICANT: DELLOW, KIMBERLEY A.
TITLE OF INVENTION: G9130 Lacking the Transmembrane
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy
                                                       FEATURE:
                                                                      MOLECULE TYPE: CDNA
                                                                                                     STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX
STREET: 1100 NEW YORK AVENUE
CITY: WASHINGTON
                                                                                      TOPOLOGY:
                                                                                                                         TYPE: nucleic acid
                                                                                                                                             ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2482 ATTTCACATTTTGAAAGG 2499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      527 HisProAsnPheAlaPheSerValSerSerValAsnSerLeuSerAsnThrIlePheLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ---SerHisPheAsnArg 623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGlu------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIleValAsnGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTCTCAAGATCCGAGTCTACCCAGCCCTTGTTAGAT-----TCAGAGGAGCAGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AsnSerValGluGluGluThrThrMetLeuLeuGluAsnAspSerProSerGluThrIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTCCAGTATTCTACCGTGGTACACAGTGGCTACAGACACCAAGTTCCGTCAGTCCAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlyGluLeuSerLeuIleLeuAsnGlnGly---GluCysSerSerProAspIleGln---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGCCAAGCATTTCTAGCAGTGATGAAAATGAATCTTCA---CAAAACACTTCGAGCACT 2268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCAGAAGATCTACAATTAGTAGATCATGTAGATGGCGGTGATGGTATTTTGCCCCAGGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                            2754 base pairs
                                                                                                                                                                                               (202) 371-2540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
                  1..2754
                                    Sg
                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                               Floppy disk
                                                                                                          both
                                                                                                                                                                                                                                                                                                                                                          US/09/312,611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 - CAGTACTTCAAACAGAACTGCAGTCAGCATGAATCCAGTCCAGAT
                                                                                                                                                                                                                                                       0623.0530002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -----SerGlyAsnAsnProArgLeuGlnLys
                                                                                                                                                                                                                                                                                                                                                                                               Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                     밁
                                                                                  ঠ
                                                                                                                         밁
                                                                                                                                                         ঠ
                                                                                                                                                                                            맑
                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                 र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-667-289-2 (1-629) x US-09-312-611-5 (1-2754)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
0
::
                                                                                                                                                                                                                                                                       607
                                                                                                                                                                                                                                                                                             201 AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIlsVal-----
                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    460 TTGGAGACAACTTCACTTTAAAATCTGAATGGGCAACACACAGTTTGCTGATTGCAAA 519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       134 ValileTyrGluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyr 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              343
                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                 162 ---ValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrTleAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     154 IleAspThrLysTyrValValHis------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             114 IleCysGlyLysAspIleSerSerGlyTyrProProAspIleProAspGluValThrCys 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  286 TCATTAAATATTCAGCTCACTTGCAACATTCTTACATTCGGACAGCTTGAACAGAAT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        232 CAATATACTATC-----ATAAACAGAACAGCATCCAGTGTCACCTTTACAGATATAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              172 TTTCATGTAAATGCTAATTACATTGTCTGGAAAACCAAACCATTTTACTATTCCTAAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   118 CTTCATTCTAATTTCACTGCAGTTTGT-----GTGCTAAAGGAAAAATGTATGGATTAT 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     64 GGTGAACTTCTAGATCCATGT---GGTTATATCAGTCCTGAA---TCTCCAGTTGTACAA 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94 GluProHisAlaSerMetTyrCysThrAlaGluCysProLysHisPheGlnGluThrLeu 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        74 ArgPheGlnIleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              64 LeuHisPheTyrLysAsnGlyIle------LysGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  44 MetGlyMetAsnileSerIleTyrCysGlnAlaAlaIleLysAsnCysGlnProArgLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24 GlylleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThrIlePheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4 TIGACGTIGCAGACTIGGGTAGTGCAAGCCTTGTTTATTTTCCTCACCACTGAATCTACA 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4 ValThrileGlnTrpAspAlaVallleAlaLeuTyrileLeuPheSerTrpCyeHisGly :::|||:::|||
 AsnPheThrTyrValGlnGlnSerGluPheTyrLeuGluProAsnIleLysTyrValPhe
                                                                                                                                                                                                                                                                                                                                                                   IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
|||
                                                       AACATTCAATATAGGACCAAAGATGCCTCAACTTGGAGCCAGATTCCTCCTGAAGACACA
                                                                                      GluMetArgTyrLysAlaThrThrAsnGlnThrTrpAsn---ValLysGluPheAspThr
                                                                                                                                                              ProLysThrIleIleTyrTrpAspSerGlnThr----ThrIleGluLysValSerCys
                                                                                                                                                                                                 AAGCCCAATCCGCCACATAATTTATCAGTGATCAACTCAGAGGAACTGTCTAGTATCTTA
                                                                                                                                                                                                                                                                                                                                             ATTGAA-----
                                                                                                                                                                                                                                                                                                                                                                                                              GCAAAACGTGACACCCCCACCTCATGCACTGTTGATTATTCTACTGTGTATTTTTGTCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTTTATGGAATCACAATAATTTCAGGCTTGCCTCCAGAAAAACCTAAAAATTTGAGTTGC
                                                                                                                             AAATTGACA-----
                                                                                                                                                                                                                                    -----IleProSerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrVal
                                                                                                                                                                                                                                                                     GCCCTTGGGAAGGTTACATCAGAT-----CATATCAATTTTGATCCTGTATATAAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTGTGAACGAG---GGGAAGAAAATGAGGTGTGAGTGGGATGGTGGAAGGGAAACACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.16e-12
211.00
32.7%
19.4%
6.3%
                                                                                                                             TGGACCAACCCAAGTATTAAGAGTGTTATAATACTAAAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
                                                                                                                                                                                                                                                                                                                                             ----GTCTGGGTAGAAGCAGAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              43
                       292
                                                          831
                                                                                            272
                                                                                                                               771
                                                                                                                                                                253
                                                                                                                                                                                                   720
                                                                                                                                                                                                                                    235
                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                          218
                                                                                                                                                                                                                                                                                                                                             606
                                                                                                                                                                                                                                                                                                                                                                                200
                                                                                                                                                                                                                                                                                                                                                                                                                   579
                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             93
```

476 TYF 476 TYF 476	CGCACCTATTIAGAGGGAACTIAGCAGAGAGCAAATGCTATTTGATAACAGTTACTCCA MetlleThrGlu	373 IleGlyIlePheAsn	832 GCATCCACCCGATCTTCATTCACTGTCCAAGACCTTTAACAGAATATGTGTTT 891 293 GlnValArgCysGlnGluThrGlyLysArgTyrTrpGlnProTrpSerSer 309 :::::
CITY: PALO ALTO STATE: CALIFORNIA COUNTRY: USA COUNTRY: USA COMPUTER READABLE FORM: COMPUTER READABLE FORM: COMPUTER: IBM PC compatible COMPUTER: IBM PC compatible COMPUTER: Ploppy disk COMPUTER: Ploppy disk COMPUTER: IBM PC compatible COMPUTER: IBM PC compatible COMPUTER: TO COMPUTER: OF COMPUTER: COMPUTER: TO COMPATER: TO COMPUTER: COMPUTER: TO COMPATER: TO COMPUTER: COMPUTER: Word Perfect 6.1 for Windows/MS-DOS 6.2 CURRENT APPLICATION DATA: CLASSIFICATION LONGER: US/09/023,655 FILING DATE: HEREWITH CLASSIFICATION DATA: PRIOR APPLICATION DATA:	ATTTCACATTTTGA 1131 11, Application 607879 COCKB, Benj COCKB, Benj COCKB, Benj COCKB,	547 2269 565 2329 585 587 2377 605 2437	CTGTTCTGCTTTAATAAGCAGACCTAAATAAACACATCTGGCCTAATGTCCAGAT LeuAsnThrGlyTyrLysProGlnIleSer

```
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REGISTRATION NUMBER: 24,0001 US
REFERENCE/DOCKET NUMBER: PA.0001 US
TELEPHONE: (650) 855-0555
TELEPHONE: (650) 855-0555
TELEPAX: (650) 845-4166
INFORMATION FOR SEQ ID NO: 1131:
SEQUENCE CHARACTERISTICS:
LENGTH: 3085 base pairs
TYPE: mucleic acid
STRANDEDNESS: single
                                                                                         ક
                                                                                                                                     밁
                                                                                                                                                                         8
                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                     ई
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             १
                                                                                                                                                                                                                                                                                           음 성
                                                                                                                                                                                                                                                                                                                                                       몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         श्र
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-667-289-2 (1-629) x US-09-023-655-1131 (1-3085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-023-655-1131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: linear
IMMEDIATE SOURCE:
LIBRARY: GENBANK
CLONE: 9186353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE:
181 IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                 487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   319
                                                                                                                                                                                                                                                       134 ValileTyrGluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyr 153
                                                                                                                                                                                                                                                                                                                               114 IleCysGlyLysAspIleSerSerGlyTyrProProAspIleProAspGluValThrCys
                                                                                                                                                                                                                                                                                                                                                                       541 TCATTAAATATTCAGCTCACTÍGCAACATTCTTACATTCGGACAGCTTGAACAGAAT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             427
                                                                                                                                                                             154 IleAspThrLysTyrValValHis------
                                                                                                                                                                                                                                                                                                                                                                                                               94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         44 MetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGlnProArgLys 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4 ValThrIleGlnTrpAspAlaValIleAlaLeuTyrIleLeuPheSerTrpCysHisGly 23
                                                                                                                                                                                                                                                                                             GTTTATGGAATCACAATAATTTCAGGCTTGCCTCCAGAAAAACCTAAAAATTTGAGTTGC 657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ArgPheGlnIleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuHisPheTyrLysAsnGlyTle------LysGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTCATTCTAATTTCACTGCAGTTTGT-----GTGCTAAAGGAAAAATGTATGGATTAT 426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThrIlePheLys 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGACGTTGCAGACTTGGGTAGTGCAAGCCTTGTTTATTTTCCTCACCACTGAATCTACA 318
                                                           GCAAAACGTGACACCCCCÁCCTCATGCACTGTTGATTATTCTÁCTGTGTATTTTGTCÁÁC
                                                                                             ---ValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn 180
                                                                                                                                       TTGGAGACAAACTTCACTTTAAAATCTGAATGGGCAACACAAGTTTTGCTGATTGCAAA 774
                                                                                                                                                                                                                                                                                                                                                                                                           GluProHisAlaSerMetTyrCysThrAlaGluCysProLysHisPheGlnGluThrLeu 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAATATACTATC-----ATAAACAGAACAGCATCCAGTGTCACCTTTACAGATATAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTGAACTTCTAGATCCATGT---GGTTATATCAGTCCTGAA---TCTCCAGTTGTACAA
                                                                                                                                                                                                                   ATTGTGAACGAG----GGGAAGAAAATGAGGTGTGAGTGGGATGGTGGAAGGGAAACACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2.35e-12
209.00
32.7%
19.4%
6.3%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative: Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3085
172
118
276
320
44
                                                                                                                                                                                                                                                                                                                                                                       597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           श्च
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                               S
                                                                                                                                                         밁
                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                               ঠ
                                                                             8
                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1087
                                                                                                                                                                                                                                                                                                                                                                                         1531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         321 GlnValThrSerLysAlaPheGlnHisAspThr------TrpAsnSerGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             254 GluMetArgTyrLysAlaThrThrAsnGlnThrTrpAsn---ValLysGluPheAspThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               201 AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleVal-----
                                                                                                                                                                                                                                                                     IleProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeu---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGATTCGCTGTATGAAGGAAGATGGTAAGGGATACTGGAGTGACTGGAGTGAAGAAGCA 1206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnValArgCys---GlnGluThrGlyLysArgTyrTrpGlnProTrpSerSer-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AsnPheThrTyrValGlnGlnSerGluPheTyrLeuGluProAsnIleLysTyrValPhe 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTGAA----
   CCACCTTCCAAAGGACCTACTGTTCGGACAAAAAAAGTAGGGAAAAACGAAGCTGTCTTA 1866
                                       IleProGluHisLysProThrAspTyrLysLys-----GluAsnThrGlyProLeu 458
                                                                                                                                                                                                                                     GTGTTATCAGATAAAGCACCCTGTATCACAGACTGGCAACAAGAAGATGGTACCGTGCAT 1689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IleGlyIlePheAsn-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCATCCCATACTCAAGGCTACAGAACTGTACAACTCGTGTGGAAGACATTGCCTCCTTTT 1326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCATCCÁCCCGATCTTCATTCACTGTCCAAGACCTTAAACCTTTTACAGAATATGTGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AACATTCAATÄTAGGACCAAAGATGCCTCAACTTGGAGCCAGATTCCTCCTGAAGACACA 1086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProLysThrIleIleTyrTrpAspSerGlnThr-----ThrIleGluLysValSerCys 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCCCAATCCGCCÁCATAATTTATCAGTGATCAACTCAGÁGGAACTGTCTAGTATCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----IleProSerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCCCTTGGGAAGGTTACATCAGAT-----CATATCAATTTTGATCCTGTATATAAAGTG
                                                                               GTATATGCTGATGGACCAGGAAGCCCTGAATCCATAAAGGCATACCTTAAACAAGCT---
                                                                                                                       CGCACCTATTTAAGAGGGAACTTAGCAGAGAGCAAATGCTATTTGATAACAGTTACTCCA
                                                                                                                                                                                               -----MetAsnAsnAsnSerSerGluGlnValLeuTyr------ValAspPro 432
                                                                                                                                                                                                                                                                                                                 CCAAGGGAATCTGTAAAGAAATATATACTT------GAGTGGTGT-----
                                                                                                                                                                                                                                                                                                                                                 ---ArgThrGlyIlehysArgArgIleheuheuheuhleProhysTrpheuTyrGluAsp
                                                                                                                                                                                                                                                                                                                                                                                         CCTGTAATGGATCTTAAAGCATTCCCCCAAAGATAACATGCTTTGGGTGGAATGGACTACT 1590
                                                                                                                                                                                                                                                                                                                                                                                                                               -----ArgserPhe-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspileGlyLeuLeuGlyMetileValPheAlaValMetLeuSerIleLeuSerLeu 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAAAATTACÁCÁGTTAATGCCACAAAACTGÁCÁGTAAATCTCÁCÁAAATGATCGC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----Thrval---AlaSerIleSerThrGlyHisLeuThrSerAspAsnArgGly 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAAGCCAATGGAAAATCTTGGATTATGAAGTGACTCTCACAAGATGGAAATCACATTTA 1386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTGGGATCACCTATGAAGATAGACCATCTAAAGCACCAAGTTTCTGGTATAAAATAGAT 1266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----ProPhePheHisLysThrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAATTGACA-----TÖĞACCAACCCAAGTATTAAGAGTGTTATAATACTAAAATAT 1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ------TATCTAGCAACCCTAACAGTAAGAAATCTT 1470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----GluThrValPro----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----GTCTGGGTAGAAGCAGAGAAT
                                                                                                                                                             1749
                                                                                                                                                                                                                                                                             418
                                                                                                                                                                                                                                                                                                                   1629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       235
```

```
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                     S
                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                        멍
                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                       당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ર્શ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                         RESULT 12
US-09-949-002-47
                                                                                                                                                              밁
Sequence 47, Application US/09949002
Patent No. 6900016
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH INFLAMMATORY AUTOIMMUNE DISEASE, METHODS OF DETECTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2227
                                                                                                                                                            2737 ATTTCÁCÁTTTTGAAÁGG 2754
                                                                                                                                                                                                                                                                                                                                                                        2584 TTCTCAAGATCCGAGTCTACCCAGCCCTTGTTAGAT-----TCAGAGGAGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2047 GAAGGTGGGAAGGATGGTCCAGAATTCACTTTTACTACCCCAAAGTTTGCTCAAGGAGAA 2106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTGAAGCCATAGTCGTGCCTGTTTGCTTAGCATTCCTATTGACAACTCTTCTGGGAGTG
                                                                                                                                                                                                                                                                                                   CCAGAAGATCTACAATTAGTAGATCATGTAGATGGCGGTGATGGTATTTTGCCCCAGGCAA
                                                                                                                                                                                                                                                                                                                        ProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIleValAsnGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                        AsnSerValGluGluGluThrThrMetLeuLeuGluAsnAspSerProSerGluThrIle
                                                                                                                                                                                                                                                                                                                                                                                                                                           GTCCAGTATTCTACCGTGGTACACAGTGGCTACAGACACCAAGTTCCGTCAGTCCAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlyGluLeuSerLeuIleLeuAsnGlnGly---GluCysSerSerProAspIleGln---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGCCAAGCATTTCTAGCAGTGATGAAATGAATCTTCA---CAAAACACTTCGAGCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HisProAsnPheAlaPheSerValSerSerValAsnSerLeuSerAsnThrIlePheLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAAATGACAAAAAGCCTTTTTCCAGAAGATCTGAAATCATTGGACCTGTTCAAAAAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerLeuThrLeuLysPro---ProValAsp-----SerLeuAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCAAAAGATCAAATGTATTCAGATGGCAATTTCACTGATGTAAGTGTTGTGGAAATAGAA 2346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTTCAAAGAGTCATATTGCCCAGTGGTCACCTCACACTCCTCCAAGGCACAATTTTAAT 2286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuAsnThrGlyTyrLysProGlnIleSer-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGTTCTGCTTTAATAAGCGAGACCTAATTAAAAAACACATCTGGCCTAATGTTCCAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACATTGTCCTCTTTGACTAGTGACACATTGTACATGGTACGAATGGCAGCATACACAGAT 2046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TATAGAACCATCATTGGAAATGAAACTGCTGTGAATGTGGATTCTTCCCCACACAGAATAT 1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGTGGGACCAACTTCCTGTTGATGTTCAGAATGGATTTATCAGAAATTATACTATATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GluThrArgAspTyrPro------GlnAsnSerLeuPheAspAsnThrThrValVal
                                                                                                                                                                                                                               -----CAGTACTTCAAACAGAACTGCAGTCAGCATGAATCCAGTCCAGAT 2736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----SerGlyAsnAsnProArgLeuGlnLys 526
                                                                                                                                                                                                                                                              LeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGlu---------
                                                                                                                                                                                             -SerHisPheAsnArg
                                                                                                                                                                                               623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----IleProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AsnPheLeu
                                                                                                                                                                                                                                                                                                    2691
                                                                                                                                                                                                                                                                                                                                                                        2631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2166
                                                                                                                                                                                                                                                                                                                                                                                                          584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/949,00 CURRENT FILING DATE: 2000-01-28 PRIOR APPLICATION NUMBER: 60/231,401 PRIOR FILING DATE: 2000-09-08 NUMBER OF SEQ ID NOS: 10823 SOFTWARE: FastSEQ for Windows Version 4. SEQ ID NO 47 LENGTH: 3085
     S
                                        밁
                                                                   Ś
                                                                                                           밁
                                                                                                                                      S
                                                                                                                                                                           밁
                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-667-289-2 (1-629) x US-09-949-002-47 (1-3085)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-949-002-47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: AND USES FILE REFERENCE: CL000790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               No:
                                                                        201
                                                                                                                                                                                                                                                                                                                                                                                                                       114 IleCysGlyLysAspIleSerSerGlyTyrProProAspIleProAspGluValThrCys 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     64 LeuHisPheTyrLysAsnGlyIle------LysGlu 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            44 MetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGlnProArgLys 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24 GlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThrIlePheLys 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4 ValThrileGlnTrpAspAlaVallleAlaLeuTyrIleLeuPheSerTrpCysHisGly 23
                                                                                                                                                                                                                                                                                                                                                      ValileTyrGluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyr 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GluProHisAlaSerMetTyrCysThrAlaGluCysProLysHisPheGlnGluThrLeu 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleVal-----
                                                                                                                                            IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
                                                                                                                                                                                                                                                 TTGGAGACAAACTTCACTTTAAAATCTGAATGGGCAACACACAAGTTTGCTGATTGCAAA
                                                                                                                                                                                                                                                                                IleAspThrLysTyrValValHis------
                                                                                                                                                                                                                                                                                                                     ATTGTGAACGAG---GGGAAGAAAATGAGGTGTGAGTGGGATGGTGGAAGGGAAACACAC 714
                                                                                                                                                                                                                                                                                                                                                                                        GTTTATGGAATCACAATAATTTCAGGCTTGCCTCCAGAAAAACCTAAAAATTTGAGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCATTAAATATTCAGCTCACTTGCAACATTCTTACATTCGGACAGCTTGAACAGAAT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAATATACTATC-----ATAAACAGAACAGCATCCAGTGTCACCTTTACAGATATAGCT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTCATGTAAATGCTAATTACATTGTCTGGAAAACAAACCATTTTACTATTCCTAAGGAG 486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTCATTCTAATTTCACTGCAGTTTGT-----GTGCTAAAGGAAAAATGTATGGATTAT 426
     ------IleProSerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrVal
                                           GCCCTTGGGAAGGTTACATCAGAT-----CATATCAATTTTGATCCTGTATATAAAGTG
                                                                                                                                                                              GCAAAACGTGACACCCCCÁCCTCATGCACTGTTGATTÄTTCTÁCTGTGTATTTTGTCAAC
                                                                                                                                                                                                               ---ValLysSerLeuGluThrGluGluGluGlnTlyrLeuThrSerSerTyrIleAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2.35e-12
209.00
32.7%
19.4%
6.3%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3085
172
118
276
320
                                                                                                                                                                                                                                                                                                                                                                                            657
          235
                                           915
                                                                                                                                             200
                                                                                                                                                                                834
                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                     774
                                                                                                                                                                                                                                                                                        161
                                                                              218
                                                                                                              861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 597
```

419	AAATTGACATGGACCAACCCAGTATTAAGAGTGTATAATATTACTTAATATTACTTAATATTACTTAATATTACTTAATATTACTTAATATTACTTAATATTACTTAATATTACTTAATATTACTTAATATTACTTAATATTACTTAATATTACTTAATATTACTTAATATTACTTAATATTACTTCAATTATAGACCAAAGATGGCCTCAACTTGGAGCCAGATTCCTCCTGAAGACCAAAAATATTCCTCCTGAAGACCACAAAAATATTCCTCCTGAAGACCACAAAAATATTCCTCCTGAAGACCACAAAAATATTCCTCCTGAAGACCACAAAAATATTCCTCCTGAAGACCACAAAAATATGTTTTTTTT	916 AAGCCCAATCCGCCACATAATTTATCAGTGATCAACTCAGAGGAACTGTCTAGTATCTTA 975 236 ProlysThrIleIleTyrTrdAspSerGlnThrThrIleGluLysValSerCys 253
SULT 13 -09-949-002-250 Sequence 250, A Patent No. 6900 GENERAL INFORMA APPLICANT: VEN TITLE OF INVEN TITLE OF INVEN TITLE OF TIVEN TITLE OF SEO NUMBER OF SEO	Db 1987 ACATTGTCCTCTTGACTAGTGACACATTGTACATGGTACGAATGCAGCATRCACAGT 2046 Qy 476	Db 1927 TATAGAACCATCATTGGAAATGAAACTGCTGTGAATGTGGATTCTTCCCCACACAGAATAT 1986 Oy 476 476

중 음 중

8 8 8 8 8 8 8

중 음 중 음

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; SOFTWARE: FastSEQ f
; SEQ ID NO 250
; LENGTH: 3085
; TYPE: DNA
; ORGANISM: Human
; ORGANISM: Human
                                                                                                                                                                                                                                                                                 중 음 중
                                                                                                                                                                                                                                                                                                                                                                              몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              중 유
                                                            밁
                                                                                      5
                                                                                                                                                                                        뭐
                                                                                                                                                                                                               중 유
                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-667-289-2 (1-629) x US-09-949-002-250 (1-3085)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No.:
                                                                                                                                                             201
                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                     154 IleAspThrLysTyrValValHis------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     114 IleCysGlyLysAspIleSerSerGlyTyrProProAspIleProAspGluValThrCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       487 CAATATACTÁTĆ-----ÁTÁÁÁĆAGAÁĆAGCATCCAGTGTCACCTTTACAGATATAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      373 CTTCATTCTAATTTCACTGCAGTTTGT-----GTGCTAAAGGAAAAATGTATGGATTAT 426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 259 TTGACGTTGCAGACTTGGCTAGTGCAAGCCTTGTTTATTTTCCTCACCACTGAATCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                      134 VallleTyrGluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    74 ArgPheGlnIleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                64 LeuHisPheTyrLysAsnGlyIle------LysGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    44 MetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGlnProArgLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24 GlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThrIlePheLys 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 ValThrIleGlnTrpAspAlaValIleAlaLeuTyrIleLeuPheSerTrpCysHisGly
                              ProLysThrIleIleTyrTrpAspSerGlnThr----ThrIleGluLysValSerCys 253
                                                                                                                                                                                                               ĠĊĊĊŤŤĠĠĠAAGGTTACAŤĊĀGAT----CATÁŤĊAATTTTĠÁŤCCTGTATATAAAGTG
                                                                                                                                                           AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleVal-----
                                                                                                                                                                                         ATTGAA-----GTCTGGGTAGAAGCAGAAAT
                                                                                                                                                                                                                                                           GCAAAACGTGACACCCCCACCTCATGCACTGTTGATTATTCTACTGTGTATTTTGTCAAC
                                                                                                                                                                                                                                                                                                                 TTGGAGACAAACTTCACTTTAAAATCTGAATGGGCAACACACAAGTTTGCTGATTGCAAA
                                                                                                                                                                                                                                                                                                                                                                                        ATTGTGAACGAG----GGGAAGAAAATGAGGTGTGAGTGGGATGGTGGAAGGGAAACACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTTTATGGAATCACAATAATTTCAGGCTTGCCTCCAGAAAAACCTAAAAATTTGAGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCATTAAATATTCAGCTCACTTGCAACATTCTTACATTCGGACAGCTTGAACAGAAT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluProHisAlaSerMetTyrCysThrAlaGluCysProLysHisPheGlnGluThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTCATGTAAATGCTAATTACATTGTCTGGAAAACAAACCATTTTACTATTCCTAAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAACTTCTAGATCCATGT---GGTTATATCAGTCCTGAA---TCTCCAGTTGTACAA
                                                                                           -----IleProSerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrVal
                                                                                                                                                                                                                                                                                      ---ValLysSerLeuGluThrGluGluGluGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.05e-12
208.00
32.7%
19.4%
6.3%
TGGACCAACCCAAGTATTAAGAGTGTTATAATACTAAAATAT 1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                          774
                                                                                                                                                                                                                                                                                                                                                                                                                        153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    318
                                                                975
                                                                                                                            915
                                                                                                                                                             218
                                                                                                                                                                                             861
                                                                                                                                                                                                                                                           834
                                                                                                                                                                                                                                                                                                                                                          161
                                                                                                                                                                                                                                                                                                                                                                                        714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      63
             밁
                                        S
                                                                             밁
                                                                                                     S
                                                                                                                                          밁
                                                                                                                                                                        á
                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                            1867
                                                                                                                                                                                                                                                                                                                                          1690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1441
                                                                                                                                                                                                                                                                                                                                                                                                         1630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1591 CCAAGGGAATCTGTAAAGAAATATATACTT-----GAGTGGTGT-------
                                                                                                                                                                            459
                                                                                                                                                                                                                                            442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     254 GluMetArgTyrLysAlaThrThrAsnGlnThrTrpAsn---ValLysGluPheAspThr 272
                                                                                                                                          GAGTGGGACCAACTTCCTGTTGATGTTCAGAATGGATTTATCAGAAATTATACTATATTT 1920
                                                                                                                                                                          GluThrArgAspTyrPro------GlnAsnSerLeuPheAspAsnThrThrValVal 475
                                                                                                                                                                                                            CCACCTTCCAAAGGACCTACTGTTCGGACAAAAAAAGTAGGGAAAAAACGGAAGCTGTCTTA
                                                                                                                                                                                                                                     IleProGluHisLysProThrAspTyrLysLys------GluAsnThrGlyProLeu
                                                                                                                                                                                                                                                                          GTATATGCTGATGGACCAGGAAGCCCTGAATCCATAAAGGCATACCTTAAACAAGCT---
                                                                                                                                                                                                                                                                                                                                                                                                       GTGTTATCAGATAAAGCACCCTGTATCACAGACTGGCAACAAGAAGATGGTACCGTGCAT 1689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IleGlyIlePheAsn-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAAAATTACACAGTTAATGCCACAAAACTGACAGTAAATCTCACAAATGATCGC----- 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnValArgCys---GlnGluThrGlyLysArgTyrTrpGlnProTrpSerSer-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACATTCAATATAGGACCAAAGATGCCTCAACTTGGAGCCAGATTCCTCCTGAAGACACA 1086
                ACATTGTCCTCTTTGACTAGTGACACATTGTACATGGTACGAATGGCAGCATACACAGAT
                                                                                                                                                                                                                                                                                                          CGCACCTATTTAAGAGGGÄÄCTTAGCAGÄĞAGCAAATGCTÄTTTGATAACAĞTTACTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                      IleProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeu---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ---ArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAsp 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTGTAATGGATCTTAAAGCATTCCCCCAAAGATAACATGCTTTGGGTGGAATGGACTACT 1590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----TATCTAGCAACCCTAACAGTAAGAAATCTT 1470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAAGCCAATGGAAAAATCTTGGATTATGAAGTGACTCTCACAAGATGGAAATCACATTTA 1386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlnValThrSerLysAlaPheGlnHisAspThr-----TrpAsnSerGlyLeu 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCATCCCATACTCAAGGCTACAGAACTGTACAACTCGTGTGGAAGACATTGCCTCCTTTT 1326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTGGGATCACCTATGAAGATAGACCATCTAAAGCACCAAGTTTCTGGTATAAAATAGAT 1266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ### SINGATTCGCTGTATGAAGGAAGATGGTAAGGGATACTGGAGTGACTGAAGAAGCA 1206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCATCCACCCGATCTTCATTCACTGTCCAAGACCTTAAACCTTTTACAGAATATGTGTTT 1146
                                                                             TATAGAACCATCATTGGAAATGAAACTGCTGTGAATGTGGATTCTTCCCACACAGAATAT 1986
                                                                                                                                                                                                                                                                                                                                                                       ------MetAsnAsnAsnSerSerGluGlnValLeuTyr------ValAspPro 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----ArgSerPhe-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AspIleGlyLeuLeuGlyMetIleValPheAlaValMetLeuSerIleLeuSerLeu 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -----ThrVal---AlaSerIleSerThrGlyHisLeuThrSerAspAsnArgGly 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AsnPheThrTyrValGlnGlnSerGluPheTyrLeuGluProAsnIleLysTyrValPhe 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ----ProphePheHisLysThrPro 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ----- 320
                                                                                                                                                                                                                                                                            1806
                                                                                                                                                                                                                                                                                                                                            1749
                                                                                                                                                                                                                                                                                                                                                                                                                                           418
                                                                                                                                                                                                               1866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        380
```

S

ફ

밁

```
RESULT 14
US-08-825-558-3
COUNTRY: USA
ZIP: 20005
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                       Sequence 3, Application US/08825558
Patent No. 5965724
GENERAL INFORMATION:
APPLICANT: SHARKEY, ANDREW
APPLICANT: SMITH, STEPHEN K.
                                                                                                                                                                                                                                                                                                                          APPLICANT: SHARKEY, ANDREW
APPLICANT: SMITH, STEPHEN K.
APPLICANT: DELLOW, KIMBERLEY A.
TITLE OF INVENTION: Gp 130 Lacking the Transmembrane Domain
NUMBER OF SEQUENCES: 14
                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                     STREET: 1100 NEW CITY: WASHINGTON
                                                                                                                                                                                                                                                                                  ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2737 ATTTCACATTTTGAAAGG 2754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2524 GTCCAGTATTCTACCGTGGTACACAGTGGCTACAGACACCCAAGTTCCGTCAGTCCAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2107 ATTGAAGCCATAGTCGTGCCTGTTTGCTTAGCATTCCTATTGACAACTCTTCTGGGAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2047 GAAGGTGGGAAGGATGGTCCAGAATTCACTTTTACTACCCCAAAGTTTTGCTCAAGGAGAA 2106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        619 ---SerHisPheAsnArg 623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          527 HisProAsnPheAlaPheSerValSerSerValAsnSerLeuSerAsnThrIlePheLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCAAAAGATCAAATGTATTCAGATGCAATTTCACTGATGTAAGTGTTGTGGAAATAGAA 2346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuAsnThrGlyTyrLysProGlnIleSer-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCAGAAGATCTACAATTAGTAGATCATGTAGATGGCGGTGATGGTATTTTTGCCCAGGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProGluGlnThrLeuLeuProAspGluPheValSerCysLeuGlyIleValAsnGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTCTCAAGATCCGAGTCTACCCAGCCCTTGTTAGAT-----TCAGAGGAGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AsnSerValGluGluThrThrMetLeuLeuGluAsnAspSerProSerGluThrIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlyGluLeuSerLeuIleLeuAsnGlnGly---GluCysSerSerProAspIleGln---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGCCAAGCATTTCTAGCAGTGATGAAAATGAATCTTCA---CAAAACACTTCGAGCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAAATGACAAAAAGCCTTTTCCAGAAGATCTGAAATCATTGGACCTGTTCAAAAAAGGAA 2406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerLeuThrLeuLysPro---ProValAsp-----SerLeuAsp------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProGluGlySerHisLeuSerAsnAsnAsn------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTTCAAAGAGTCATATTGCCCCAGTGGTCACCTCCACACTCCTCCAAGGCACAATTTTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGTTCTGCTTTAATAAGCGAGACCTAATTAAAAAACACATCTGGCCTAATGTTCCAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuProSerIleAsnThrTyrPheProGlnAsnIleLeuGlu------
                                                                                                                                                                                                                                                              E: STERNE, KESSLER, 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ------CAGTACTTCAAACAGAACTGCAGTCAGCATGAATCCAGTCCAGAT 2736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----SerGlyAsnAsnProArgLeuGlnLys
                                                                                                                                                                                                                                                                                  GOLDSTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ----IleProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -GluIleThr 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AsnPheLeu 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                         밁
                                                                                                                          8
                                                                                                                                                                       밁
                                                                                                                                                                                                             र्
                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-667-289-2 (1-629) x US-08-825-558-3 (1-1977)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-825-558-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/825,558
FILING DATE: 19-MAR-1997
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: ESMOND, ROBERT W.
REGISTRATION NUMBER: 32,893
REGISTRATION NUMBER: 0623.053000
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (202)371-2540
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 1977 base pair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY:
                                                                                                                                                                                                                                                                403
                                                                                                                                                                                                                                                                                                                                                                         114 IleCysGlyLysAspIleSerSerGlyTyrProProAspIleProAspGluValThrCys
                                                                                                                                                                                                                 154 IleAspThrLysTyrValValHis------
                                                                                                                                                                                                                                                                                                      134 ValileTyrGluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyr 153
                                                                                                                                                                                                                                                                                                                                                                                                                                        286 TCATTAAATATTCAGCTCACTTGCAACATTCTTACATTCGGACAGCTTGAACAGAAT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             118 CTTCATTCTAATTTCACTGCAGTTTGT-----GTGCTAAAGGAAAAATGTATGGATTAT 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  64 GGTGAACTTCTAGATCCATGT---GGTTATATCAGTCCTGAA---TCTCCAGTTGTACAA 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94 GluProHisAlaSerMetTyrCysThrAlaGluCysProLysHisPheGlnGluThrLeu 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                74 ArgPheGlnIleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     44 MetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGlnProArgLys 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24 GlyIleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThrIlePheLys 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4 TIGACGITGCAGACTIGGGTAGIGCAAGCCTIGITTATTTTCCTCACCACTGAATCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4 ValThrileGlnTrpAspAlaValileAlaLeuTyrIleLeuPheSerTrpCysHisGly
                                                                                                                                                                                                                                                                                                                                                 GTTTATGGAATCACAATAATTTCAGGCTTGCCTCCAGAAAAACCTAAAAATTTGAGTTGC
                                                                                                                                                                                                                                                              ATTGTGAACGAG---GGGAAGAAAATGAGGTGTGAGTGGGATGGTGGAAGGGAAACACAC
                                                                                         GCAAAACGTGACACCCCCÁCCTCATGCACTGTTGATTATTCTACTGTGTATTTTGTCAAC
                                                                                                                                 ---VallysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAATATACTATC-----ATAAACAGAACAGCATCCAGTGTCACCTTTACAGATATAGCT 285
                                                                                                                                                                           TTGGAGACAAACTTCACTTTAAAATCTGAATGGGCAACACACAAGTTTGCTGATTGCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1977 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (202) 371-2540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.86e-12
207.00
36.8%
20.6%
6.2%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ω
..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0623.0530001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1977
124
97
208
172
32
                                                                                                                                                                                                                        -----
                                                                                                                                                                                                                                                                                                                                                                                             133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         63
                                                                                           579
                                                                                                                                     180
                                                                                                                                                                              519
                                                                                                                                                                                                                        161
                                                                                                                                                                                                                                                                  459
                                                                                                                                                                                                                                                                                                                                                     402
                                                                                                                                                                                                                                                                                                                                                                                                                                        342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 231
```

밁 8 뮻 र् 밁

밁 ঠ 중 유 Ş 밁 ક 밁 र् F ð 믕 ঠ 밁 र् 밁

5 밁

밁

ATTGAA-----

```
1132 CAAAATTACÁCÁGTTAATGCCACAAAACTGÁCÁGTAAATCTCÁCÁAAATGÁTCGC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1072 GAAGCCAATGGAAAAATCTTGGATTATGAAGTGACTCTCACAAGATGGAAATCACATTTA 1131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1012 CCATCCCATACTCAAGGCTACAGAACTGTACAACTCGTGTGGAAGÁCÁTTGCCTCCTTTT 1071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    892 AGGATTCGCTGTATGAAGGAAGATGGTAAGGGATACTGGAGTGACTGGAGTGAAGAAGCA
442 IleProGluHisLysProThrAspTyrLysLys------GluAsnThrGlyProLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         353 AspIleGlyLeuLeuLeuGlyMetIleValPheAlaValMetLeuSerIleLeuSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                321 GlnValThrSerLysAlaPheGlnHisAspThr-----TrpAsnSerGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                952 AGTGGGATCACCTATGAAGATAGACCATCTAAAGCACCAAGTTTCTGGTATAAAATAGAT 1011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      293 GlnValArgCys---GlnGluThrGlyLysArgTyrTrpGlnProTrpSerSer-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  273 AsnPheThrTyrValGlnGlnSerGluPheTyrLeuGluProAsnIleLysTyrValPhe
::: |||:::||| :::|||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
||| |||||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      201 AlaLeuGlyMetGluGluSerLysGlnLeuGlnIleHisLeuAspAspIleVal-----
                                        GTATATGCTGATGGACCAGGAAGCCCTGAATCCATAAAGGCATACCTTAAACAAGCT---
                                                                                                                              CGCACCTATTTAAGAGGGAACTTAGCAGAGAGCAAATGCTATTTGATAACAGTTACTCCA
                                                                                                                                                             -----MetAsnAsnAsnSerSerGluGlnValLeuTyr-----ValAspPro
                                                                                                                                                                                                             GTGTTATCAGATAAAGCACCCTGTATCACAGACTGGCAACAAGAAGATGGTACCGTGCAT 1434
                                                                                                                                                                                                                                                       IleProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeu---
                                                                                                                                                                                                                                                                                                  CCAAGGGAATCTGTAAAGAAATATATACTT------GAGTGGTGT-----
                                                                                                                                                                                                                                                                                                                                      ---ArgThrGlyIleLysArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAsp
                                                                                                                                                                                                                                                                                                                                                                                      CCTGTAATGGATCTTAAAGCATTCCCCCAAAGATAACATGCTTTGGGTGGAATGGACTACT
                                                                                                                                                                                                                                                                                                                                                                                                                              ------ArgSerPhe-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----ProphepheHisLysThrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCATCCACCCGATCTTCACTCCCCCCCAAGACCTTTAAACCTTTTACAGAATATGTGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACATTCAATATAGGACCAAAGATGCCTCAACTTGGAGCCAGATTCCTCCTGAAGACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluMetArgTyrLysAlaThrThrAsnGlnThrTrpAsn---ValLysGluPheAspThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAATTGACA-----TGGACCAACCCAAGTATTAAGAGTGTTATAATACTAAAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProLysThrIleIleTyrTrpAspSerGlnThr-----ThrIleGluLysValSerCys 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGCCCAATCCGCCACATAATTTATCAGTGATCAACTCAGAGGAACTGTCTAGTATCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -----IleProSerAlaAlaValIleSerArgAlaGluThrIleAsnAlaThrVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCCTTGGGAAGGTTACATCAGAT-----CATATCAATTTTGATCCTGTATATAAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -ThrVal---AlaSerIleSerThrGlyHisLeuThrSerAspAsnArgGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -----TATCTAGCAACCCTAACAGTAAGAAATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----GluThrValPro----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ----GTCTGGGTAGAAGCAGAAAT
                                                                                   -----IleĻγsGluIlePhe
    458
                                                                                                                              1494
                                                                                                                                                                                                                                                          418
                                                                                                                                                                                                                                                                                                  1374
                                                                                                                                                                                                                                                                                                                                             399
                                                                                                                                                                                                                                                                                                                                                                                      1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1215
                                          1553
                                                                                     441
                                                                                                                                                                    432
                                                                                                                                                                                                                                                                                                                                                                                                                                380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              200
                               5
                                                                                 밁
                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                   ; LOCATION: US-09-312-611-3
    문
                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                    US-10-667-289-2 (1-629) x US-09-312-611-3 (1-1977)
                                                                                                                                                                                                                                 Query Match:
                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-312-611-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent No. 6380160
GENERAL INFORMATION:
APPLICANT: SHARKEY
APPLICANT: SHARKEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Vc
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/09/312,611
FILLING DATE: 17-MAY-1999
CLASSIFICATION: 800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: ESMOND, ROBERT W.
REGISTRATION NUMBER: 32,893
REFERENCE/DOCKET NUMBER: 06
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                      No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, OF STREET: 1100 NEW YORK AVENUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: WASHINGTON STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1612 GAGTGGGACCAACTTCCTGTTGATGTTCAGAATGGATTTATCAGAAATTATACTATATTT 1671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1552 CCACCTTCCAAAGGACCTACTGTTCGGACAAAAAAAGTAGGGAAAAACGAAGCTGTCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         476 Tyr 476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               459
  64 GGTGAACTTCTAGATCCATGT---GGTTATATCAGTCCTGAA---TCTCCAGTTGTACAA 117
                             24 GlylleThrAsnIleAsnCysSerGlyHisIleTrpValGluProAlaThrIlePheLys
                                                                                 20005
                                                                                                                         4 ValThrIleGlnTrpAspAlaValIleAlaLeuTyrIleLeuPheSerTrpCysHisGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAT 1674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GluThrArgAspTyrPro-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1977 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SHARKEY, ANDREW
SMITH, STEPHEN K.
DELLOW, KIMBERLEY A.
TVENTION: Gpl30 Lacking the Transmembrane Domain
SEQUENCES: 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
                                                                                                                                                                                                                                                                                                                                                                                                        1..1974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (202) 371-2600
                                                                                                                                                                                                               1.86e-12
207.00
36.8%
20.6%
6.2%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US/09/312,611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ω.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0623.0530002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GOLDSTEIN & FOX
                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
                                                                                                                                                                                                                                   Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -GlnAsnSerLeuPheAspAsnThrThrValVal 475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1611
                                                                                     63
```

ঠ

S В S

밁 ঠ 밁 S 밁 S

> 721 236

뭐

832

밁 8 밁 र् 밁 δ 밁 ঠ 밁 ঠ 밁 S 밁 Ş 밁 ঠ 밁

1216

373 IleGlyIlePheAsn------

밁 S 문 ঠ

336 1131	321 GlnValThrSerLyaAlaPheGlnHisAspThrTrpAsnSerGlyLeu :::::::
320 1071	317GluthtvalPro 1012 CCATCCCATACTCAAGGCTACAGAACTGTACAACTCGTGTGGAAGACATTGCCTCTTTT
316 1011	310ProPhePheHisLysThrPro ::::: 952 AGTGGGATCACCTATGAAGATAGACCATCTAAAGCACCAAGTTTCTGGTATAAAATAGAT
309 951	293 GlnValArgCysGlmGluThrGlyLysArgTyrTrpGlnProTrpSerSer ::::: ::
292 891	273 ABnPheThrTyrValGlnGlnSerGluPheTyrLeuGluProABnIleLy8TyrValPhe
272 831	254 GluMetArgTyrLysAlaThrThrAsnGlnThrTrpAsnValLysGluPheAspThr
253 771	236 ProLysThrIleIleTyrTrpAspSerGlnThrThrIleGluLysValSerCys
235 720	219IleProSerAlaAlaVallIeSerArgAlaGluThrIleAsnAlaThrVal
218	201 AlaLeuGlyMetGluGluSerLy8GlnLeuGlnIleHi8LeuA8pA8pIleVal
200	181 IleSerThrAspSerLeuGlnGlyGlyLysLysTyrLeuValTrpValGlnAlaAlaAsn
180 579	162ValLysSerLeuGluThrGluGluGluGlnGlnTyrLeuThrSerSerTyrIleAsn :::
161 519	154 IleAspThrLysTyrValValHis
153 459	134 ValileTyrGluTyrSerGlyAsnMetThrCysThrTrpAsnAla***LysLeuThrTyr
133 402	114 IleCysGlyLysAspIleSerSerGlyTyrProProAspIleProAspGluValThrCys
113 342	94 GluProHisAlaSerMetTyrCysThrAlaGluCysProLysHisPheGlnGluThrLeu :::
93 285	74 ArgPheGlnIleThrArgIleAsnLysThrThrAlaArgLeuTrpTyrLysAsnPheLeu ::::::
73 231	64 LeuHisPheTyrLy8AsnGlyIleLy8Glu
63 171	MetGlyMetAsnIleSerIleTyrCysGlnAlaAlaIleLysAsnCysGlnProArgLys ::: :::

ర్హ	8	Дb	Ş	용	ફ	DЬ	ঠ	Дb	Ş	ДĎ	ş	Дb	ş	Db	ş	В	ঠ	Db	ঠ	В	Ş
1672	476	1612	459 (1552	442	1495	433 1	1435 (419 -	1375	400	1336 (381 .	1276 (378 -	1216	373 1	1186 -	353 /	1132 (337 -
TAT 1674	Tyr 476	GAGTGGGACCAACTTCCTGTTGATGTTCAGAATGGATTTATCAGAAATTATACTATATTT 1671	GluThrArgAspTyrProGlnAsnSerLeuPheAspAsnThrThrValVal 475	CCACCTTCCAAAGGACCTACTGTTCGGACAAAAAAAGTAGGGAAAAAACGAAGCTGTCTTA 1611	IleProGluHisLysProThrAspTyrLysLysGluAsnThrGlyProLeu 458	GTATATGCTGATGGACCAGGAAGCCCTGAATCCATAAAGGCATACCTTAAACAAGCT 1551	MetlleThrGlu	CGCACCTATTTAAGAGGGAACTTAGCAGAGAGAGACAAATGCTATTTGATAACAGTTACTCCA 1494		GIGITATCAGATAAAGCACCCIGTATCACAGACTGGCAACAAGAAGATGGTACCGTGCAT 1434	IleProAsnMetLysAsnSerAsnValValLysMetLeuGlnGluAsnSerGluLeu 41	CCAAGGGAATCTGTAAAGAAATATATACTTGAGTGGTGT 1374	ArgThrGlyIleLysArgArgIleLeuLeuLeuIleProLysTrpLeuTyrGluAsp 39	CCTGTAATGGATCTTAAAGCATTCCCCCAAAGATAACATGCTTTGGGTGGAATGGACTACT 1335	380	GTTGGCAAATCAGATGCAGCTGTTTTAACTATCCCTGCCTG	IleGlyIlePheAsn 377	TATCTAGCAACCCTAACAGTAAGAAATCTT 1215	AspIleGlyLeuLeuGlyMetIleValPheAlaValMetLeuSerIleLeuSerLou 372	CAAAATTACACAGTTAATGCCACAAAACTGACAGTAAATCTCACAAATGATCGC 1185	ThrValAlaSerIleSerThrGlyHisLeuThrSerAspAsnArgGly 35
		71	ហ	11	00	13	7	94	N	34	œ	74	ø	35	0	75	7	15	N	85	N

Search completed: October 14, 2006, 14:50:05 Job time : 360 secs